## **Federal National Mortgage Association**



#### **Guaranteed Mortgage Pass-Through Certificates**

(Residential Mortgage Loans)

Principal and Interest payable on the 25th day of each month

THE OBLIGATIONS OF THE FEDERAL NATIONAL MORTGAGE ASSOCIATION UNDER ITS GUARANTY ARE OBLIGATIONS SOLELY OF THE CORPORATION AND ARE NOT BACKED BY THE FULL FAITH AND CREDIT OF THE UNITED STATES.

THE CERTIFICATES ARE EXEMPT FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT OF 1933 AND ARE "EXEMPTED SECURITIES" WITHIN THE MEANING OF THE SECURITIES EXCHANGE ACT OF 1934.

The Guaranteed Mortgage Pass-Through Certificates ("Certificates") are issued and guaranteed by the Federal National Mortgage Association (the "Corporation" or "Fannie Mae"), a corporation organized and existing under the laws of the United States, under the authority contained in Section 304(d) of the Federal National Mortgage Association Charter Act (12 U.S.C. 1716 et seq.).

Each Certificate offered hereby and by the Supplement related hereto will represent an undivided interest in a pool of mortgage loans (a "Pool") to be formed by the Corporation. Each Pool will consist of residential mortgage loans ("Mortgage Loans") either previously owned by the Corporation or purchased by it in connection with the formation of the Pool. Each Pool will consist entirely of one of the following: (i) fixed-rate level installment Mortgage Loans, (ii) fixed-rate growing equity Mortgage Loans that provide for scheduled annual increased payments, with the full amount of the increase applied to principal, (iii) fixed-rate graduated payment Mortgage Loans having deferred interest features, (iv) conventional variable-rate California Mortgage Loans, (v) other adjustable-rate Mortgage Loans, and (vi) fixed-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units, some of which multifamily Mortgage Loans may have balloon payments or other irregular features or characteristics.

Interests in each Pool will be evidenced by a separate issue of Certificates. Information regarding the aggregate principal amount and characteristics of the related Pool (including the type of Mortgage Loans in the Pool) will be furnished in a Supplement to this Prospectus at the time of the identification of the Pool.

Unless the related Supplement to this Prospectus provides otherwise, Certificates evidencing undivided interests in Pools formed on or after May 1, 1985, and containing Mortgage Loans of the type described in (i), (ii), (iv), or (v) above, will be available in book-entry form only.

The Corporation will have certain contractual servicing responsibilities with respect to each Pool. In addition, the Corporation will be obligated to distribute scheduled monthly installments of principal and interest (adjusted to reflect the Corporation's servicing and guaranty fee) to Certificateholders, whether or not received. The Corporation also will be obligated to distribute to Certificateholders the full principal balance of any foreclosed Mortgage Loan, whether or not such principal balance is actually recovered.

No salesman, dealer, bank or other person has been authorized to give any information or to make any representation other than those contained in this Prospectus and, if given or made, such information or representation must not be relied upon as having been authorized by the Corporation. This Prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the Certificates offered hereby and by the related Supplement nor an offer of the Certificates to any person in any state or other jurisdiction in which such offer would be unlawful.

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#### SUMMARY OF PROSPECTUS

The following summary of certain pertinent information is qualified in its entirety by reference to the detailed information appearing elsewhere in this Prospectus and by reference to the information with respect to each pool of residential mortgage loans ("Mortgage Loans") contained in the supplement to this Prospectus (a "Prospectus Supplement") to be prepared in connection with the issue of Guaranteed Mortgage Pass-Through Certificates (the "Certificates") evidencing undivided interests in such pool of Mortgage Loans ("Pool").

Title of Security

Guaranteed Mortgage Pass-Through Certificates.

Issuer and Guarantor

Federal National Mortgage Association (the "Corporation"), a corporation organized and existing under the laws of the United States. See "Federal National Mortgage Association" and the remainder of the Prospectus following that section. The obligations of the Corporation under its guaranty are obligations solely of the Corporation and are not backed by, nor entitled to, the full faith and credit of the United States.

Description of Security

Each Certificate will represent a fractional undivided interest in a Pool of Mortgage Loans to be formed by the Corporation. A Certificate in definitive form will initially represent at least \$25,000 unpaid principal amount of Mortgage Loans. A Certificate in bookentry form will initially represent at least \$1,000 unpaid principal amount of Mortgage Loans. Unless the related Supplement to this Prospectus provides otherwise, Certificates evidencing undivided interests in Pools formed on or after May 1, 1985, and containing Mortgage Loans of the type described in (i), (ii), (iv) or (v) under "The Mortgage Pools" below, will be available in book-entry form only and will not be convertible to definitive form.

Interest

Interest on each Mortgage Loan will be passed through monthly to Certificateholders, commencing on the 25th day of the month following the month of initial issuance of the related Certificates. For all Pools containing fixed-rate Mortgage Loans ("Fixed-Rate Pools"), interest will be passed through at a uniform Pass-Through Rate (or Accrual Rate in the case of Fixed-Rate Pools containing graduated payment mortgage loans), which will be specified in the Prospectus Supplement and will not be greater than the lowest annual interest rate borne by any Mortgage Loan in the related Pool, less a specified minimum annual percentage representing compensation for servicing and the Corporation's guaranty and less, in the case of Fixed-Rate Pools containing graduated payment Mortgage Loans, deferred interest, which is added to the principal balances of the underlying Mortgage Loans. For Pools containing variable-rate Mortgage Loans ("VRM Pools"), interest will be passed through on the basis of a Weighted Average Pass-Through Rate, which is equal at any time to the then-current weighted average of the Mortgage Interest Rates of all Mortgage Loans in the related VRM Pool, less a specified fixed annual percentage representing compensation for servicing and the Corporation's guaranty. For Pools containing adjustable-rate Mortgage Loans "ARM Pools"), interest will be passed through on each Mortgage Loan at the interest rate at the time applicable thereto less (i) the Corporation's fixed servicing and guaranty fee applicable to such Mortgage Loan and (ii) any deferred interest that is added to the principal balance of such Mortgage Loan pursuant to its terms. See "Yield Considerations."

Principal (including prepayments)

Passed through monthly, commencing on the 25th day of the month following the month of initial issuance of the related Certificates. See "Maturity and Prepayment Assumptions" and "Description of Certificates."

#### Guaranty

The Corporation is obligated to distribute scheduled monthly installments of principal and interest (adjusted to reflect the Corporation's servicing and guaranty fee) on the Mortgage Loans in a Pool, whether or not received. The Corporation is also obligated to distribute to Certificateholders the full principal balance of any foreclosed Mortgage Loan, whether or not such principal balance is actually recovered. If the Corporation were unable to perform these guaranty obligations, distributions to Certificateholders would consist solely of payments and other recoveries on Mortgage Loans and, accordingly, delinquencies and defaults would affect monthly distributions to Certificateholders. See "Description of Certificates—The Corporation's Guaranty."

Servicing

The Corporation will be responsible for servicing the Mortgage Loans and will, in most cases, contract with mortgage lenders to perform certain servicing functions on its behalf. See "Description of Certificates—Servicing Through Lenders."

The Mortgage Pools

Each Pool will consist entirely of Mortgage Loans of only one of the following types: (i) fixed-rate level installment Mortgage Loans, (ii) fixed-rate growing equity Mortgage Loans that provide for scheduled annual increased payments, with the full amount of the increase applied to principal, (iii) fixed-rate graduated payment Mortgage Loans with deferred interest features, (iv) conventional variable-rate California Mortgage Loans, (v) other adjustable-rate Mortgage Loans, and (vi) fixed-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units, some of which multifamily Mortgage Loans may have balloon payments or other irregular features or characteristics. The Mortgage Loans in each Pool will have unpaid principal balances aggregating not less than \$1,000,000. Each Mortgage Loan will be secured by a first lien on a residential property and each Mortgage Loan will meet the applicable standards set forth under "Purchase Program." Pool information as to the type of Mortgage Loans (including whether such Mortgage Loans are conventional Mortgage Loans or are insured by the Federal Housing Administration or guaranteed by the Veterans Administration), the aggregate principal balance of the Mortgage Loans as of the Issue Date, the Pass-Through Rate for Certificates evidencing interests in level installment Fixed-Rate Pools, the then-current Weighted Average Pass-Through Rate for Certificates evidencing interests in VRM Pools, the Accrual Rate for Certificates evidencing interests in graduated payment Fixed-Rate Pools, and the latest maturity date of any Mortgage Loan will be contained in the related Prospectus Supplement. For a VRM Pool or an ARM Pool, the related Prospectus Supplement will also contain information respecting the index upon which adjustments are based, the frequency of interest rate and payment adjustments and any maximum or minimum limitations thereon, the Corporation's fixed guaranty and servicing fee, and, in the case of an ARM Pool, whether the underlying Mortgage Loans contain provisions for the deferral of interest.

#### Financial Results

Fannie Mae earned net income of \$222 million for the first half of 1988, \$376 million in 1987 and \$105 million in 1986. The increase in income during 1987 over 1986 was primarily a result of improved interest spreads, an increase in MBS fees, a lower effective tax rate, and additional interest income recorded as a result of implementation of Statement of Financial Accounting Standards No. 91 ("SFAS 91"). During the fourth quarter of 1987, management elected to adopt retroactively the new accounting standard for loan fees and also took other actions that affected earnings. Without those changes, 1987 net income would have been \$230 million, or \$2.83 per share, compared with \$183 million, or \$2.46 per share, originally reported for 1986. As a result of such retroactive implementation of SFAS 91, financial information for 1986 and earlier years has been restated. Included in 1987 net income is an additional \$290 million, or \$3.57 per share, resulting from the adoption of SFAS 91. This increase was partially offset by management's decisions to sell low-yielding mortgage assets, repurchase high-coupon debt, increase the provision for loan losses, and make accounting adjustments, which in the aggregate reduced earnings by \$144 million, or \$1.77 per share, for 1987. The Corporation's net mortgage portfolio totaled \$99.2 billion at June 30, 1988, compared with \$90.3 billion at June 30, 1987. Mortgage-backed securities outstanding at June 30, 1988 totaled \$157.4 billion, compared with \$121.3 billion at June 30, 1987.

#### THE MORTGAGE POOLS

The Federal National Mortgage Association (the "Corporation") has implemented a program for (a) the setting aside of residential mortgage loans (the "Mortgage Loans") into separate pools (the "Pools") bearing distinctive identification and (b) the issuance and sale of trust certificates of beneficial interest evidencing pro rata undivided ownership interests in the Mortgage Loans comprising each separate Pool (the "Guaranteed Pass-Through Certificates" or "Certificates"). The Mortgage Loans may be purchased by the Corporation expressly for the Pools or may be Mortgage Loans that have been held by the Corporation in its own portfolio. Each Pool will consist of Mortgage Loans evidenced by promissory notes (the "Mortgage Notes") secured by first mortgages or deeds of trust (the "Mortgages") on either one- to four-family (also referred to as "single-family") residential properties or multifamily projects consisting of five or more dwelling units (the "Mortgaged Properties"). A Pool will contain Mortgage Loans of only one of the following types: (i) fixed-rate level payment Mortgage Loans ("Level Payment Mortgage Loans"), (ii) fixed-rate growing equity Mortgage Loans that provide for scheduled annual increased payments, with the full amount of the increase applied to principal ("GEMs"), (iii) fixed-rate graduated payment Mortgage Loans with deferred interest features ("GPMs"), (iv) conventional variable-rate California Mortgage Loans ("VRMs"), (v) other adjustable-rate Mortgage Loans ("ARMs"), and (vi) fixed-rate Mortgage Loans secured by multifamily projects consisting of five or more dwelling units ("Multifamily Mortgage Loans"), some of which Multifamily Mortgage Loans may have balloon payments or other irregular features or characteristics. The Mortgage Loans may be either conventional Mortgage Loans (i.e., not insured or guaranteed by any United States government agency) or Mortgage Loans that are either insured by the Federal Housing Administration or guaranteed by the Veterans Administration ("Conventional Mortgage Loans" and "FHA/VA Mortgage Loans," respectively). The Mortgage Loans purchased expressly for the Pools will be sold to the Corporation by eligible institutions that meet certain requirements set forth under "Purchase Program" and are referred to herein as "Lenders." No Pool will consist of Mortgage Loans having an aggregate unpaid principal balance of less than \$1,000,000 on the first day of the month of issuance of the related Certificates. See "Purchase Program—Mortgage Loan Eligibility" for a description of certain criteria applicable to the eligibility of Mortgage Loans for inclusion in Pools.

Interests in each Pool will be evidenced by a separate series of Certificates (an "Issue"). The Corporation will acquire the Mortgage Loans that it has purchased expressly for Pools under purchase contracts. By entering into such contracts, the Corporation will obligate itself to issue Certificates to, or to the order of, the Lenders named in the contracts, upon delivery to the Corporation of the required Mortgage Loans conforming to the Corporation's standards. The Corporation will not insure or guarantee the performance by any Lender of its obligation to deliver Mortgage Loans and, correspondingly, does not insure or guarantee the performance by any person of any obligation to deliver Certificates.

The Mortgage Loans in each Pool of fixed-rate Mortgage Loans other than GPMs will be held for the benefit of the holders of Certificates ("Certificateholders" or "Holders") pursuant to the combined terms of a trust indenture, as amended, executed by the Corporation in its corporate capacity and in its capacity as Trustee (the Trust Indenture dated as of November 1, 1981, as modified and amended by a First Supplemental Indenture dated as of February 15, 1982, a Second Supplemental Indenture dated as of October 1, 1982, a Third Supplemental Indenture dated as of August 1, 1983, a Fourth Supplemental Indenture dated as of May 1, 1984, a Fifth Supplemental Indenture dated as of July 1, 1984, a Sixth Supplemental Indenture dated as of May 1, 1985, a Seventh Supplemental Indenture dated as of August 1, 1986, and an Eighth Supplemental Indenture dated as of January 1, 1987, being herein called the "Fixed-Rate Trust Indenture"), and a supplement thereto for the related Issue (the "Issue Supplement"). The Mortgage Loans in each Pool of VRMs will be held for the benefit of Certificateholders pursuant to the combined terms of an Issue Supplement and a Trust Indenture dated as of July 1, 1982, as modified and amended by a First Supplemental Indenture dated as of December 1, 1983, a Second Supplemental Indenture dated as of September 1, 1984, a Third Supplemental Indenture dated as of

February 1, 1985, a Fourth Supplemental Indenture dated as of August 1, 1985, and a Fifth Supplemental Indenture dated as of January 1, 1987, each executed by the Corporation in its corporate capacity and in its capacity as Trustee (such Trust Indenture, as amended, being hereinafter called the "VRM Trust Indenture"). The Mortgage Loans in each Pool of GPMs and ARMs will be held for the benefit of the Certificateholders pursuant to the combined terms of an Issue Supplement and a Trust Indenture dated as of July 1, 1984, as modified and amended by a First Supplemental Indenture dated as of January 1, 1987 (the "GPM Trust Indenture") and a Trust Indenture dated as of July 1, 1984, as modified and amended by a First Supplemental Indenture dated as of May 1, 1985, and a Second Supplemental Indenture dated as of January 1, 1987 (the "ARM Trust Indenture"), respectively, each executed by the Corporation in its corporate capacity and in its capacity as Trustee. The Fixed-Rate Trust Indenture, the VRM Trust Indenture, the GPM Trust Indenture, and the ARM Trust Indenture are herein, collectively, referred to as the "Trust Indenture" or "TI" where common terms and provisions are being referred to or described. Certain capitalized words or series of words in this Prospectus refer to and are further defined in the Trust Indenture. The Corporation will be responsible for the administration and servicing of the Mortgage Loans in the Pool, including the supervision of the servicing activities of Lenders, if appropriate, the collection and receipt of payments from Lenders, and the remittance of distributions and certain reports to Certificateholders. The Corporation will be entitled to receive a fee for its guaranty obligations and its services pursuant to the Trust Indenture. The fee to the Corporation for any Mortgage Loan (out of which it will compensate Lenders for servicing the Mortgage Loans) will, as to any Pool containing fixed-rate Mortgage Loans (a "Fixed-Rate Pool"), be equal to the difference between the annual interest rate borne by the Mortgage Loan and the annual rate of interest paid to Certificateholders at the Pass-Through Rate for the related Fixed-Rate Pool or the Accrual Rate for Fixed-Rate Pools containing GPMs (a "GPM Pool"). For any Pool containing ARMs or VRMs (an "ARM Pool" or "VRM Pool"), the Corporation will similarly compensate itself from interest payments on the underlying ARMs or VRMs in an amount, as to each ARM or VRM Pool, determinable from information in the related Prospectus Supplement. The Corporation will reserve the right to remove the servicing responsibility from a Lender at any time if it considers such removal to be in the best interest of Certificateholders. In such event, the Corporation will meet its obligation to provide servicing either by directly servicing the Mortgage Loans itself or by finding a replacement Lender

The Corporation's obligations with respect to the Mortgage Loans will be limited to the servicing responsibilities under the Trust Indenture, and, in the event of any delinquency in payment or loss on any Mortgage Loan, its obligation to make supplemental payments in amounts described herein under "Description of Certificates—The Corporation's Guaranty."

Because the principal amount of the Mortgage Loans in a Pool will decline (with the exception of Fixed-Rate Pools containing GPMs and certain ARM Pools that contain ARMs providing for deferred interest) monthly as principal payments, including prepayments, are received, each Certificate Principal Balance (defined as to any Certificate to be the principal amount of Mortgage Loans in the related Pool evidenced thereby) will also decline over time. See "Maturity and Prepayment Assumptions."

#### YIELD CONSIDERATIONS

#### Effect of Delay

The effective yield to Certificateholders in all Pools will be reduced slightly below the yield otherwise produced by the applicable Pass-Through Rate, Accrual Rate or Weighted Average Pass-Through Rate because the distribution of interest that accrues from the first day of each month will not be made until the 25th day of the month following the month of accrual.

#### Fixed-Rate Pools Not Containing GPMs

Each Fixed-Rate Pool not containing GPMs will consist of Mortgage Loans that bear simple interest at fixed annual rates ("Mortgage Interest Rates"). Such a Fixed-Rate Pool may include Mortgage Loans that bear different Mortgage Interest Rates. The Pass-Through Rate of interest payable to Certificateholders of each such Issue will be equal to the lowest Mortgage Interest Rate borne by any Mortgage Loan in the related Pool, less a specified minimum annual percentage representing compensation for servicing and the Corporation's guaranty. Because the Pass-Through Rate for an Issue will not be greater than the lowest Mortgage Interest Rate for the related Pool, any disproportionate principal prepayments among Mortgage Loans bearing different Mortgage Interest Rates will not affect the return to Certificateholders.

When a Mortgage Loan is prepaid or otherwise liquidated, the proceeds of such prepayment or liquidation will, unless the Corporation elects in its discretion to make any distribution thereof in the following month, be passed through to Certificateholders in the second month following the month of such prepayment or other liquidation. Because the Corporation agrees to distribute on each Distribution Date to each Certificateholder an amount as to interest representing one month's interest at the Pass-Through Rate on the Certificate Principal Balance, any prepayment or other liquidation of a Mortgage Loan and the timing of the distribution of the proceeds thereof will have no effect on the interest return to Certificateholders.

Assuming performance by the Corporation of its obligations under its guaranty, the net effect of each distribution respecting interest will be the pass-through to each Certificateholder of an amount that is equal to one month's interest at the Pass-Through Rate on the Certificate Principal Balance of such Holder's Certificate. See "Description of Certificates—Payments on Mortgage Loans; Distributions on Certificates."

#### **GPM Pools**

A GPM Pool will consist of fixed-rate fully amortizing Mortgage Loans providing for monthly payments that increase annually for a period of years (generally between three to seven) and are level thereafter. During all or part of the period in which monthly payments are increasing, those payments will not be sufficient to cover the full amount of interest on the GPM at the Mortgage Interest Rate borne thereby. The amount of each such interest insufficiency will be added to the principal balance of the GPM, which will accrue interest thereafter on this new increased amount.

GPM Pools will have characteristics similar to Fixed-Rate Pools described above commencing with the time at which payments are sufficient to cover interest on the principal balances of the underlying GPMs. Prior to that time, the Certificates evidencing interests in GPM Pools will provide for the monthly distribution of the scheduled interest payment on each Mortgage Loan in the Pool less the Corporation's servicing and guaranty fee attributable thereto, the amount of any such fee being equal to the difference between the fixed Mortgage Interest Rate at which interest accrues on the GPM and the Accrual Rate borne by the related Certificates.

The Prospectus Supplement relating to a GPM Pool will set forth the period over which payments on the GPMs increase.

The Corporation's guaranty of Certificates evidencing interests in GPM Pools will cover the principal amount of each underlying GPM, including any portion thereof representing deferred interest. The Corporation will, following the period (the "Deferred Interest Period") during which such payments are insufficient to cover interest at the Mortgage Interest Rate on their then-outstanding principal balances, including deferred interest that has been added thereto, also be obligated to distribute on each Distribution Date one month's interest at the Accrual Rate on the then-outstanding principal balances of the underlying GPMs. During the Deferred Interest Period, the Corporation's guaranty will cover, as to each underlying GPM, the amount of each scheduled payment less the Corporation's servicing and guaranty fee applicable thereto.

#### VRM Pools

A VRM Pool will be composed of California home Mortgage Loans which bear interest at rates that will vary in response to a cost of funds index published by the Federal Home Loan Bank of San Francisco, as described in the Prospectus Supplement. The interest rates will be adjusted periodically at uniform specified intervals. The Prospectus Supplement to be prepared with respect to each Issue will specify the fixed annual percentage servicing fee or "Spread" (out of which the Corporation will compensate Lenders) that the Corporation will retain from interest payments on Mortgage Loans in the related Pool. The resultant interest rate, equal as to each Mortgage Loan to the related Mortgage Interest Rate less this fixed percentage servicing fee, is the "Pass-Through Rate" for that Mortgage Loan. The Corporation has agreed in the VRM Trust Indenture to pass through payments of interest on the Mortgage Loans in a Pool, whether or not received, in an amount equal to one month's interest at the then-current weighted average of the Pass-Through Rates of all Mortgage Loans in that Pool (the "Weighted Average Pass-Through Rate") multiplied by the Certificate Principal Balance as of the preceding Distribution Date (or, respecting the initial distribution, as of the Issue Date). The Weighted Average Pass-Through Rate as of the Issue Date as well as information regarding the original indexes, the initial Mortgage Interest Rates and the then-current Mortgage Interest Rates of all Mortgage Loans in a VRM Pool will also be set forth in the Prospectus Supplement. This Weighted Average Pass-Through Rate will change with any changes in the underlying Mortgage Interest Rates and as disproportionate payments of principal are made on Mortgage Loans bearing different Mortgage Interest Rates.

When a Mortgage Loan is prepaid or otherwise liquidated, the proceeds of such prepayment or liquidation will, unless the Corporation elects in its discretion to make any distribution thereof in the following month, be passed through to Certificateholders in the second month after such prepayment or other liquidation. Since the Corporation will agree in each Certificate to distribute on each Distribution Date to the Holder thereof an amount as to interest representing one month's interest at the then-current Weighted Average Pass-Through Rate on the related Certificate Principal Balance, any prepayment or other liquidation of a Mortgage Loan and the timing of the distribution of the proceeds thereof will have no effect on the interest return to Certificateholders.

Assuming performance by the Corporation of its obligations under its guaranty, the net effect of each distribution respecting interest will be the pass-through to each Certificateholder of an amount which is equal to one month's interest at the then-current Weighted Average Pass-Through Rate on the Certificate Principal Balance of such Holder's Certificate. See "Description of Certificates—Payments on Mortgage Loans; Distributions on Certificates."

#### **ARM Pools**

An ARM Pool will contain Mortgage Loans that bear interest at rates that will vary in response to a single specified index (such as then-prevailing yields on five-year Treasury obligations) and will adjust periodically at uniform specified intervals. The actual Mortgage Interest Rate at any time borne by an ARM will be equal to a specified percentage, or Margin, over the index rate then applicable thereto. ARMs may or may not contain provisions limiting the amount by which rates may be adjusted upward or downward and may or may not limit the amount by which monthly payments may be increased or decreased to accommodate upward or downward adjustments in interest. Certain ARMs may provide for periodic adjustments of scheduled payments in order to fully amortize the Mortgage Loan by its stated maturity while other ARMs may permit that maturity to be extended or shortened in accordance with the portion of each payment that is applied to interest in accordance with the periodic interest rate adjustments.

Where an ARM provides for limitations on the amount by which monthly payments may be increased or changes to the Mortgage Interest Rate of the ARM are made more frequently than

payment changes, it is possible that an increase in the rate of interest cannot be covered by the amount of the scheduled payment. In that case, the uncollected portion of interest will be deferred and added to the principal balance of the Mortgage Loan.

Since the interest rates borne by Mortgage Loans in an ARM Pool will vary and since a portion of the interest accrued thereon may be deferred and payable at a future time, Certificates evidencing interests in such Pools will not provide for the distribution of interest at a fixed Pass-Through Rate. Rather, each Certificate issued with respect to an ARM Pool will provide for the monthly pass-through of all interest payable on each Mortgage Loan in the Pool less the Corporation's servicing and guaranty fee. In some ARM Pools, the Corporation's servicing and guaranty fee may not be the same amount as to each ARM in the ARM Pool, but will rather be a percentage amount as to each such ARM that, when subtracted from the related Margin, will cause each ARM in the ARM Pool to float above the applicable index at a single uniform "security spread" (the "Security Spread"). As a result, for such an ARM Pool, the rate at which interest accrues to Certificateholders (the "Accrual Rate") at any time (other than the period immediately following origination during which an initial rate having no relationship to the index may apply or during a period when a Mortgage Interest Rate minimum or maximum is applicable) on each Mortgage Loan included therein will be equal to the then-applicable index plus the Security Spread.

The Prospectus Supplement relating to an ARM Pool will contain information respecting the index upon which adjustments are based, the Security Spread, if any, the frequency of interest rate and payment adjustments and any maximum and minimum limitations thereon. The Prospectus Supplement will also describe any provisions for deferred interest and will, to the extent applicable, set forth the original rates of interest borne by the underlying Mortgage Loans.

The Corporation's guaranty of Certificates evidencing interests in ARM Pools will cover the principal of each underlying Mortgage Loan, including any portion thereof representing deferred interest. Its guaranty of interest will cover all interest due and payable by the mortgagor (net of the Corporation's servicing and guaranty fee). The Corporation will also agree to add to the amount of interest accompanying the prepayment of an underlying Mortgage Loan any amount by which such interest is less than one month's interest at the Accrual Rate on the prepaid principal balance thereof. As a consequence, the timing of the prepayment of a Mortgage Loan will have no effect on the interest return to Certificateholders.

#### MATURITY AND PREPAYMENT ASSUMPTIONS

The original maturities of substantially all of the Conventional Level Payment Mortgage Loans are expected to be between either 8 to 15 years or 20 to 30 years. The maturities of substantially all of the FHA/VA Level Payment Mortgage Loans at origination are expected to be 30 years. Each Level Payment Mortgage Loan with an original maturity of 30 years will provide for amortization of principal according to a schedule that, in the absence of prepayments, would result in repayment of one-half of the original principal amount of such Mortgage Loan by approximately the 23rd to 27th year, with higher Mortgage Interest Rates resulting in slower amortization of principal. A 15-year fully amortizing Level Payment Mortgage Loan would, in the absence of prepayments, result in repayment of one-half of the original principal amount by approximately the 10th to 12th year, with higher Mortgage Interest Rates resulting in slower amortization of principal.

A significant number of the Conventional Mortgage Loans may provide by their terms that in the event of the sale of all or some of the underlying property the full unpaid principal balance of the Mortgage Loan is due and payable at the option of the holder. FHA/VA Mortgage Loans contain no such "due-on-sale" provisions. As set forth under "Description of Certificates—Collection and Other Servicing Procedures," the Trust Indenture requires the Corporation

to exercise its right to accelerate the maturity of a Conventional Mortgage Loan other than a VRM in such an event so long as acceleration is permitted under applicable law unless it elects to repurchase such Mortgage Loan.

The ability of mortgage lenders and their assignees and transferees to enforce "due-on-sale" clauses was addressed by the "Garn-St Germain Depository Institutions Act of 1982," which was passed by Congress and signed into law on October 15, 1982. This legislation, subject to certain exceptions, pre-empts state statutory and case law that prohibits the enforcement of "due-onsale" clauses. Exempted from this pre-emption are mortgage loans (originated other than by federally chartered lenders) that were made or assumed during the period beginning on the date a state, by statute or statewide court decision, prohibited the exercise of "due-on-sale" clauses and ending on October 15, 1982 (the "window period"). Mortgage lenders, however, may require any successor or transferee of the borrower to meet customary credit standards. The exemption for such loans ended on October 15, 1985 unless the state acted to otherwise regulate these loans by that date. Several states passed legislation extending the assumability of the mortgage loans that were made or assumed during the window period. In the case of those states, the enforceability of "due-on-sale" clauses in loans made or assumed during the window period is limited by the provisions of the applicable state legislation. The federal legislation also enumerates nine circumstances under which a lender may not enforce "due-on-sale" clauses, e.g., the creation of a subordinate encumbrance that does not relate to a transfer of rights of occupancy in the property, a transfer by devise, descent, or operation of law on the death of a joint tenant or tenant by the entirety, and the granting of a leasehold interest of three years or less not containing an option to purchase.

Conventional Mortgage Loans purchased by the Corporation from November 10, 1980, to October 15, 1982, in jurisdictions where, on the date of origination, the law substantially restricted lenders from enforcing "due-on-sale" provisions may provide that they are due and payable at the holder's option at the end of seven years. As described in "Description of Certificates—Collection and Other Servicing Procedures," the Trust Indenture provides that the Corporation will exercise or refrain from exercising any such "call option rider" in a manner that is consistent with then-current policies or practices employed by the Corporation respecting comparable mortgage loans held in its own portfolio.

Past experience of the Federal Housing Administration ("FHA") relating to government-insured single-family mortgage loans at various interest rates with original maturities of 26 to 30 years indicates that, while some of such mortgage loans remain outstanding until the scheduled maturity, a pool of 30-year FHA-insured single-family mortgage loans will produce an average loan life of 12 years. A 12-year prepayment assumption is the industry norm for quoting yields on 30-year single-family mortgage loans and is used in generally accepted yield tables. FHA data also indicate that for a pool of 15-year single-family mortgage loans a 7-year average loan life is produced.

There can be no assurance that the rate of prepayment will conform to past FHA experience. Based upon published information and the Corporation's own experience, the rate of prepayments on 30-year single-family loans has fluctuated significantly in recent years. For example, the table under "Business—Mortgage Loan Portfolio—Mortgage Loan Portfolio Repayments" shows the increase in the level of principal repayments as a percentage of the Corporation's mortgage loan portfolio from 1983 to 1987. In 1987 and the first half of 1988, the \$15.4 billion and \$5.1 billion, respectively, in mortgage repayments (exclusive of foreclosures) that the Corporation received included approximately \$13.3 billion and \$3.9 billion, respectively, for mortgages that were prepaid.

In an environment of declining interest rates, lenders servicing mortgage loans often are asked by mortgagors to refinance the mortgage loans through issuance of new loans secured by mortgages on the same properties. The resultant prepayments, if they involve Mortgage Loans in Pools, result in the distribution to Certificateholders of the principal balances of the prepaid Mortgage Loans and their removal from the Pools. Under the Corporation's current policy,

Lenders servicing Mortgage Loans are permitted to advertise in a general manner their availability to handle refinancings, although they may not specifically target mortgagors whose Mortgage Loans are in Pools. The Corporation does not, however, permit Lenders to remove Mortgage Loans from Pools for the purpose of Mortgage Loan modifications.

In general, when the level of interest rates declines significantly below the interest rates on mortgage loans, the rate of prepayment is likely to increase, although the prepayment rate is influenced by a number of other factors, including general economic conditions and homeowner mobility. Accordingly, the Corporation cannot estimate what the prepayment experience of the Mortgage Loans in Pools will be or how it might compare with the FHA 12-year prepayment assumption respecting insured mortgage loans. See also "Description of Certificates—Termination" for a description of the Corporation's option to repurchase the Mortgage Loans in any Pool when the aggregate principal balance thereof becomes less than 10 percent of the aggregate principal balance of the Mortgage Loans in the Pool on the Issue Date.

A GEM provides for scheduled annual increases in the mortgagor's monthly payments. Because the additional scheduled portion of the monthly payments is applied to reduce the unpaid principal balance of a GEM, the scheduled maturity of a GEM will be significantly shorter than the 25- or 30-year term used as the basis for calculating the initial level installment of principal and interest applicable until the first adjustment. No GEM that matures by its terms more than 15 years subsequent to the Issue Date of the related Certificates will be eligible for inclusion in a Pool.

As set forth above under "Yield Considerations," GPMs provide for payments that increase annually for a period of years (generally between three and seven) and then amortize on a level payment basis to their stated maturity. Because the principal amount of a GPM will increase during its Deferred Interest Period, the time at which one-half of the principal amount of a GPM will be paid in accordance with its amortization schedule will be longer than for a Level Payment Mortgage Loan bearing a similar Mortgage Interest Rate. The maturities of substantially all VRMs at origination are expected to be 30 years, but the maturity of each Mortgage Loan may at the option of the mortgager be increased to a term not in excess of 40 years in the event of certain increases in the Mortgage Interest Rate. ARMs vary substantially as to their terms and it is impossible to generalize other than that, because of their adjustable feature, ARMs may be less subject to prepayment than fixed-rate Mortgage Loans should interest rates decline below levels prevailing at origination. Because both GPMs and ARMs have not been originated in quantity until recent periods, there are no reliable data available regarding their prepayment experience.

#### PURCHASE PROGRAM

Set forth below is a description of certain aspects of the Corporation's purchase program for mortgage loans eligible for inclusion in a Pool (the "Program"). The Prospectus Supplement to be prepared with respect to each Issue will contain information on the Mortgage Loans in the Pool, including information as to the type of Mortgage Loans, the aggregate principal balance of the Mortgage Loans as of the Issue Date, for Fixed-Rate Pools the Pass-Through Rate or Accrual Rate, whichever is applicable, for VRM Pools the initial Weighted Average Pass-Through Rate, and the latest maturity date of any Mortgage Loan.

#### Lender Eligibility

The Corporation will purchase Mortgage Loans from eligible federally and state-chartered savings and loan associations, mutual savings banks, commercial banks, credit unions, and similar financial institutions, the deposits or accounts of which are insured by the Federal Savings and Loan Insurance Corporation ("FSLIC"), the Federal Deposit Insurance Corporation ("FDIC"), or the National Credit Union Administration ("NCUA"), from certain other state-insured financial institutions and from certain institutions, principally mortgage bankers, that are mortgage

sellers approved by the Corporation. The Corporation, on an individual institution basis, will determine whether such institutions will be approved as Lenders for the Program by applying certain criteria, which may include depth of mortgage origination experience, servicing experience, and financial capacity. Approved Lenders will be party with the Corporation to a Mortgage Selling and Servicing Contract.

#### Mortgage Loan Eligibility

General

The Mortgage Loans to be included in each Pool will be Mortgage Loans on residential properties. Each Mortgage Loan purchased for inclusion in a Pool will be subject to and must comply with the terms of the current Selling and Servicing Guide applicable to the Program unless Fannie Mae grants an exception with respect to certain requirements. These Mortgage Loans are permanent loans (as opposed to construction and land development loans) secured by Mortgages on properties comprised of (i) single-family dwelling units, including units in condominium projects, planned unit developments, and de minimis planned unit developments or (ii) multifamily projects consisting of five or more dwelling units. The Prospectus Supplement to be prepared with respect to each Issue backed by Multifamily Mortgage Loans will describe the eligibility criteria for such loans, which will differ in certain respects from the criteria described below. Each Mortgage Loan will be documented by the appropriate FNMA/FHLMC Uniform Instrument in effect at the time of origination, or an FHA or VA mortgage instrument or other instrument acceptable to the Corporation, and will comply with all applicable federal and local laws, including laws relating to usury, equal credit opportunity, and disclosure.

There is no requirement that Mortgage Loans be payable on the first day of the month in order to be eligible for inclusion in a Pool. The Mortgage Loans must have had maturities of not more than 30 years from their date of origination, although VRMs can be extended to 40 years at the option of the mortgagor in the event of certain increases in the Mortgage Interest Rates.

#### Conventional Mortgage Loans

Pursuant to the requirements of the MBS Selling and Servicing Guide, Conventional Mortgage Loans must be real estate loans secured by first Mortgages on residential properties, with original principal balances that (when combined with the original principal balance of any second mortgage in which the Corporation has an interest) did not exceed certain federally imposed maximum principal balance limitations applicable to the Corporation. In 1988, the maximum dollar purchase limitations for Conventional Mortgage Loans are as follows: \$168,700 for mortgages secured by one-family residences (\$253,050 in Alaska and Hawaii); \$215,800 for mortgages secured by three-family residences (\$391,200 in Alaska and Hawaii); and \$324,150 for mortgages secured by four-family residences (\$486,225 in Alaska and Hawaii).

No Conventional Mortgage Loan with a loan-to-value ratio in excess of 95 percent will be included in any Pool. Conventional Mortgage Loans (other than Multifamily Mortgage Loans) with loan-to-value ratios exceeding 80 percent must have the principal amount of the indebtedness in excess of 75 percent of the appraised value of the Mortgaged Property insured by a policy of primary mortgage guaranty insurance. Each mortgage insurer must be licensed to transact a mortgage guaranty insurance business in the state where the Mortgaged Property is located and be acceptable to the Corporation as a mortgage insurer. As an alternative to the requirement to obtain mortgage insurance for Conventional Mortgage Loans with loan-to-value ratios in excess of 80 percent, Lenders may contract with the Corporation to repurchase such Conventional Mortgage Loans at a price equal to the unpaid principal balance thereof in the event of default before the loan-to-value ratio has been reduced to 80 percent of the original value.

The maximum loan-to-value ratio at the time of purchase for a Conventional Mortgage Loan secured by a first Mortgage on an owner-occupied property including the unpaid principal balances of all subordinate financing is 95 percent. In the case of a Conventional Mortgage Loan secured by a first Mortgage on a non-owner-occupied property, the maximum loan-to-value ratio

including the unpaid principal balances of all subordinate financing is 90 percent. The maximum loan-to-value ratio for Mortgage Loans secured by non-owner occupied properties is generally 80 percent but may vary based on the Corporation's evaluation of the age of a Mortgage Loan and its experience with the Lender from whom it purchases such Mortgage Loan.

Pursuant to the requirements of the MBS Selling and Servicing Guide, each Lender that sells a Conventional Mortgage Loan to the Corporation for the purposes of the Program must assume responsibility for underwriting such Conventional Mortgage Loan using the same underwriting criteria, as from time to time in effect, that must be met by mortgage loans eligible for Fannie Mae portfolio purchases. After delivery of the Conventional Mortgage Loans, the Corporation will conduct reviews of the quality of credit and property underwriting used in the origination of certain randomly selected Conventional Mortgage Loans.

#### FHA/VA Mortgage Loans

Pursuant to the requirements of the MBS Selling and Servicing Guide, FHA/VA Mortgage Loans must be real estate loans with stated constant annual rates of interest, secured by first Mortgages on residential properties. The principal balance and loan-to-value ratio of each FHA Mortgage Loan must comply with the standards established by the FHA. In the case of VA Mortgage Loans, the Corporation has imposed a maximum principal balance limitation of \$135,000. In addition, the unguaranteed portion of the VA Mortgage Loan amount cannot be greater than 75 percent of the lesser of (i) the purchase price of the property or (ii) the VA's estimate of reasonable value. Each FHA/VA Mortgage Loan must be insured or guaranteed by a valid and subsisting policy or guaranty in full force and effect. On April 15, 1986, Fannie Mae announced that it would allow newly originated and seasoned FHA/VA Mortgage Loans to be included in MBS Pools. Prior to that date, each FHA/VA Mortgage Loan had to be originated at least 12 months preceding the Corporation's purchase of the Mortgage Loan for inclusion in a Pool.

#### DESCRIPTION OF CERTIFICATES

Each Issue of Certificates will be issued pursuant to the applicable Trust Indenture described above. The applicable Trust Indenture will, as to each Issue, be supplemented by an Issue Supplement, which will be prepared at the time of the creation of such Issue. The Issue Supplement will set forth the specific terms of the Issue, such as the Pass-Through Rate applicable thereto in the case of Fixed-Rate Pools (other than those containing GPMs) and the Issue Date. The Issue Supplement will also contain any variation from the basic Trust Indenture applicable to a particular Issue, any such variation also being described in the Prospectus Supplement relating to such Issue. As set forth under "Legal Opinion," the validity of each Issue of Certificates, the Trust Indenture, and the applicable Issue Supplement will be passed upon by the General Counsel of the Corporation upon the request of any Holder of Certificates of such Issue.

Mortgage Loans not previously held in the Corporation's portfolio will be purchased pursuant to a Pool Purchase Contract for cash or in exchange for Certificates in the related Pool. Such Mortgage Loans will be serviced by one of the Corporation-approved Lenders, normally the same entity as the loan originator, pursuant to the terms of the Pool Purchase Contract, as supplemented by the MBS Selling and Servicing Guide, which is incorporated therein by reference. Copies of the Trust Indenture and the Pool Purchase Contract, together with the Selling and Servicing Guide, may be obtained from the Corporation's Washington, D.C. office, or from any of the Corporation's regional offices in Philadelphia, Atlanta, Chicago, Dallas, and Los Angeles.

The following summaries describe certain provisions of the Trust Indenture. These summaries do not purport to be complete and are subject to, and qualified in their entirety by reference to, the more complete provisions of the Trust Indenture.

#### General

The Certificates will represent Fractional Undivided Interests in the Trust Fund created pursuant to the Trust Indenture and Issue Supplement for each Issue. The Fractional Undivided Interest represented by a particular Certificate will be equal to the initial principal denomination of such Certificate set forth on the face thereof (or, if in book-entry form, entered on the books of a Federal Reserve Bank) divided by the aggregate Stated Principal Balance<sup>(1)</sup> of the Mortgage Loans in the Pool (the "Pool Principal Balance") as of the Issue Date. The Trust Fund for an Issue consists of (i) such Mortgage Loans as from time to time are subject to the Trust Indenture and Issue Supplement, (ii) such payments or other recoveries on Mortgage Loans as from time to time may be considered to be held by the Corporation for Certificateholders, (iii) property acquired by foreclosure of Mortgage Loans or by deed in lieu of foreclosure, and (iv) the interest of Certificateholders in the obligation of the Corporation to supplement payments and other recoveries on Mortgage Loans to the extent necessary to make required distributions to Certificateholders.

Unless the related Supplement to this Prospectus provides otherwise, Certificates evidencing undivided interests in Pools formed on or after May 1, 1985, (other than Pools containing GPMs or Mortgage Loans secured by multifamily projects) will be available in book-entry form only and will not be convertible to definitive form. A Fiscal Agency Agreement between the Corporation and the Federal Reserve Bank of New York makes generally applicable to Certificates in book-entry form (i) regulations governing the Corporation's use of the book-entry system, contained in 24 C.F.R. Part 81, Subpart E, (ii) such procedures, insofar as applicable, as may from time to time be established by regulations of the United States Department of the Treasury governing United States securities, as now set forth in Treasury Department Circular Number 300, 31 C.F.R. Part 306 (other than Subpart O), and (iii) the Federal Reserve Bank's operating circulars and letters. Certificates in book-entry form can be accommodated on the Federal Reserve Bank's book-entry system in a minimum denomination of \$1,000 and in additional increments of one dollar and will be freely transferable on the records of a Federal Reserve Bank.

Certificates will be maintained on the book-entry system of a Federal Reserve Bank in a manner that permits separate trading and ownership. The Federal Reserve Bank of New York will make payments on the Certificates on behalf of Fannie Mae on the applicable Distribution Dates by crediting accounts on its records or on the records of other Federal Reserve Banks. Certificates in book-entry form may be held of record only by entities eligible to maintain bookentry accounts with a Federal Reserve Bank. Such entities are not necessarily the beneficial owners of the Certificates. Beneficial owners will ordinarily hold Certificates through one or more financial intermediaries, such as banks, brokerage firms and securities clearing organizations. A Certificateholder that is not the beneficial owner of a Certificate, and each other financial intermediary in the chain to the beneficial owner, will have the responsibility of establishing and maintaining accounts for its respective customers. The rights of the beneficial owner of a Certificate with respect to Fannie Mae and the Federal Reserve Bank may be exercised only through the financial intermediaries thereof. Fannie Mae and the Federal Reserve Bank will have no direct obligation to a beneficial owner of a Certificate that is not also the owner of record according to the account maintained by the Federal Reserve Bank. The Federal Reserve Bank will act only upon the instructions of the record owner in recording transfers of a Certificate.

<sup>(1)</sup> All references herein to the Stated Principal Balance of a Mortgage Loan or to the aggregate Stated Principal Balance of all Mortgage Loans in a Pool are to the principal balance or aggregate principal balance, as the case may be, utilized by the Corporation in calculating the then-outstanding principal balances of Certificates. Such Stated Principal Balances may differ from actual principal balances for a number of reasons, including supplemental payments by the Corporation on delinquent Mortgage Loans pursuant to its guaranty obligations and delays in the distribution of certain Mortgage Loan receipts.

In the event Certificates are issued in fully registered form, such Certificates may only be issued in initial principal denominations of not less than \$25,000 and integral multiples of \$5,000 in excess of \$25,000, with the exception of one odd denomination that may be issued for each Pool. (TI Section 7.01) Certificates issued in fully registered form will be freely transferable and exchangeable at the Federal Reserve Bank of New York. A service charge may be imposed for any exchange or registration of transfer of Certificates issued in fully registered form, and the Corporation may require payment of a sum sufficient to cover any tax or other governmental charge. (TI Section 7.02)

Distributions of principal and interest on each Issue of Certificates will be made by the Corporation on the 25th day of each month (the "Distribution Date") to the persons in whose names the Certificates are entered on the books of a Federal Reserve Bank (or registered in the Certificate Register in the case of fully registered Certificates) as of the close of business on the last day of the preceding month (the "Record Date"). The first distribution for each Issue of Certificates will be in the month following the month in which the Issue Date occurs. Distributions for each Issue will be made by wire (or by check in the case of fully registered Certificates) to the person entitled thereto as it appears on the Certificate not later than the 25th day of each month; provided, however, that the final distribution in retirement of fully registered Certificates of any Issue will be made only upon presentation and surrender of the Certificates at the office or agency of the Corporation specified in the notice to Certificateholders of such final distribution.

As described under "Rights Upon Event of Default," Holders of Certificates will have the right under certain circumstances to appoint a successor Trustee.

#### Transfer of Mortgage Loans to Pools

Each Mortgage Loan transferred to a Pool will be identified in a Mortgage Loan Schedule appearing as an exhibit to the Issue Supplement for the related Issue of Certificates. In addition, the Corporation, as Trustee of the Mortgage Loans, will retain on behalf of Certificateholders the original Mortgage Note, endorsed in blank, and an assignment to the Corporation of the mortgage instrument. Usually assignments are in a form suitable for recording but they are not recorded. However, a blanket assignment may be used for the transfer of a large number of Mortgage Loans, even if the properties are not located in the same recording jurisdiction, depending on the Lender's servicing experience and its financial condition. At its option, the Corporation may choose to maintain such documents either with a custodian institution (the Lender or another institution) whose deposits or accounts are insured by the FDIC, FSLIC, or a state agency or with a subsidiary of the Lender. The Corporation will review the Mortgage Loan Schedule prior to the issuance of the Certificates and will conduct random spot checks to confirm the sufficiency of the documents after issuance of the Certificates.

Although the above procedures are intended to protect the interests of the Holders of Certificates in the Mortgage Loans in the related Pool, the law applicable to a liquidation, reorganization, or similar proceeding involving the assets of a Lender or of the Corporation is unclear and as a result no opinion can be rendered as to the status of Certificateholders' interests in the event of any such proceeding. The Corporation's guaranty would, however, by its terms be available in the event of any such proceeding involving the assets of a Lender.

#### Servicing Through Lenders

Pursuant to the Trust Indenture, the Corporation is responsible for servicing and administering the Mortgage Loans but, in its discretion, is permitted to contract with the originator of each Mortgage Loan, or another eligible servicing institution, to perform such functions under the supervision of the Corporation as more fully described herein. Any servicing contract or arrangement by the Corporation with a Lender for the direct servicing of Mortgage Loans is a

contract solely between the Corporation and that Lender, and the Certificateholders are not deemed to be parties thereto and have no claims, rights, obligations, duties, or liabilities with respect to such Lender. (TI Section 5.01)

Lenders will be obligated pursuant to the MBS Selling and Servicing Guide to perform diligently all services and duties customary to the servicing of mortgages, as well as those specifically prescribed by the MBS Selling and Servicing Guide. The Corporation will monitor the Lender's performance and has the right to remove any Lender for cause at any time it considers such removal to be in the best interest of Certificateholders. The duties performed by Lenders include general loan servicing responsibilities, collection and remittance of principal and interest payments, administration of mortgage escrow accounts, collection of insurance claims, and, if necessary, foreclosure.

The Corporation retains as to each Fixed-Rate Mortgage Loan the difference in interest between the annual Mortgage Interest Rate borne by the Mortgage Loan and the Pass-Through Rate or Accrual Rate on the Certificates. For example, if a Mortgage Loan with a 12.25 percent Mortgage Interest Rate is included in a Pool against which a Certificate with an 11.25 percent Pass-Through Rate is issued, the Corporation would be entitled to receive total compensation of one percent per annum on the Mortgage Loan. For VRMs, the Corporation will retain from interest payments a fixed annual servicing fee, or "Spread," as described under "VRM Pools" above. For ARMs, the Corporation will retain an amount equal to the percentage Spread applicable thereto applied to the outstanding principal balance as increased by any deferred interest that has been included therein. See "Yield Considerations." The Corporation is also entitled to retain prepayment fees, late charges, assumption fees, and similar charges to the extent they are collected from borrowers. The Corporation will compensate Lenders in an amount up to, but never exceeding, the amount of interest retention described above, less a prescribed minimum amount to be retained by the Corporation for itself in consideration of its guaranty obligations and servicing responsibilities.

#### Payments on Mortgage Loans; Distributions on Certificates

On the 25th day of each month (beginning with the month following the month of the Issue Date), the Corporation will, respecting each Issue, distribute to Certificateholders an amount equal to the total of (i) the principal due on the Mortgage Loans in the related Pool during the period beginning on the second day of the month prior to the month of such distribution and ending on the first day of such month of distribution (the "Due Period"), (ii) the Stated Principal Balance of any such Mortgage Loan that was prepaid in full during the second month next preceding the month of such distribution (including as prepaid for this purpose any Mortgage Loan repurchased by the Corporation as described herein because of the Corporation's election to repurchase the Mortgage Loan after it is delinquent, in whole or in part, with respect to four consecutive installments of principal and interest, or because of the Corporation's election to repurchase such Mortgage Loan under the circumstances described in the last paragraph under "Collection and Other Servicing Procedures" below), (iii) the amount of any partial prepayment of a Mortgage Loan received in the second month next preceding the month of distribution, and (iv) in respect of all Fixed-Rate Mortgage Loans other than GPMs during their Deferred Interest Period, one month's interest at the Pass-Through Rate (or Accrual Rate in the case of GPMs) on the Certificate Principal Balance as reported to Certificateholders in connection with the previous distribution (or, respecting the first distribution, the Certificate Principal Balance on the Issue Date). For purposes of distributions, a Mortgage Loan will be considered to have been prepaid in full if, in the Corporation's reasonable judgment, the full amount finally recoverable on account of such Mortgage Loan has been received, whether or not such full amount is equal to the Stated Principal Balance of the Mortgage Loan. The Corporation may, in its discretion, include with any distribution principal prepayments, both full and partial, received during the month prior to the month of distribution but is under no obligation to do so.

For each GPM during its Deferred Interest Period and each ARM, the Corporation will, on each monthly Distribution Date, distribute an amount as to interest equal to the amount of interest payable on such Mortgage Loan during the applicable Due Period (which will, in the case of GPMs during their Deferred Interest Period, and may, in the case of ARMs having deferred interest features, be less than one month's interest at the Mortgage Interest Rate) less the amount retained by the Corporation as described under "Servicing Through Lenders" above. For each VRM Pool, the Corporation will, on each Distribution Date, distribute an amount as to interest equal to one month's interest at the then-current Weighted Average Pass-Through Rate on the Certificate Principal Balance of each Certificate.

Distributions on any Distribution Date will be made to Certificateholders of record on the prior Record Date (the close of business on the last day of the immediately preceding month). Each Certificateholder will be entitled to receive an amount equal to the total amount distributed multiplied by the Fractional Undivided Interest evidenced by such Holder's Certificate.

#### The Corporation's Guaranty

The Corporation's obligation described above to distribute amounts representing scheduled principal and interest, whether or not received, and its obligation to distribute the full principal amount of any foreclosed or otherwise finally liquidated Mortgage Loan, whether or not such principal amount is actually recovered, constitute the Corporation's guaranty obligations in respect of the Certificates. If the Corporation were unable to perform such obligations, distributions to Certificateholders would consist solely of payments and other recoveries on Mortgage Loans and, accordingly, delinquencies and defaults would affect monthly distributions to Certificateholders.

#### Reports to Certificateholders

With respect to each distribution, the Corporation will cause to be forwarded to each Certificateholder with respect to all Certificates held by such Certificateholder in each Pool, a statement setting forth, to the extent applicable, the following information:

- (i) the amount, if any, due on such Certificates on the related Distribution Date on account of total scheduled and unscheduled principal (including any Deferred Interest);
- (ii) the amount due on such Certificates on the related Distribution Date on account of interest;
- (iii) the total of the cash distribution on such Certificates on the related Distribution Date;
- (iv) the Certificate Principal Balances of such Certificates on the related Distribution Date after giving effect to any distribution of principal made on such date and to any Deferred Interest added to the principal balances of the underlying Mortgage Loans during the preceding Due Period;
- (v) the total amount of any Deferred Interest that was added to the principal balances of the underlying Mortgage Loans during the preceding Due Period;
  - (vi) the amount, if any, of (i) above that is allocable to Deferred Interest;
  - (vii) the amount, if any, of (iv) above that is allocable to Deferred Interest;
- (viii) for VRM Pools, the Weighted Average Pass-Through Rate applicable to such Distribution Date; and
- (ix) for ARM Pools, the Accrual Rate applicable to such Distribution Date (or, in the event the underlying Mortgage Loans have different Accrual Rates, the approximate weighted average Accrual Rate).

Within a reasonable period of time after the end of each calendar year, the Corporation will furnish to each Person who at any time during the calendar year was a Certificateholder a statement containing the information set forth in items (i), (ii), (v), and (vi) above, in summary form for such calendar year, or for any portion thereof during which such Person was a Certificateholder.

## Servicing Compensation and Payment of Certain Expenses by the Corporation

As compensation for its activities and obligations under the Trust Indenture, the Corporation will be entitled to retain the amounts applicable to interest that are not required to be distributed to Certificateholders as described above. In addition, the Corporation is entitled to retain any amounts by which the proceeds of the liquidation of a Mortgage Loan exceed (i) the Stated Principal Balance of that Mortgage Loan and (ii) interest thereon at the Pass-Through Rate in the case of a Fixed-Rate Mortgage Loan (other than a GPM) or a VRM or interest thereon at the Accrual Rate in the case of a GPM or an ARM. The Corporation will pay all expenses incurred by it in connection with its servicing activities, including, without limitation, the fees to Lenders, and is not entitled to reimbursement therefor out of the Trust Fund.

Additional servicing compensation in the form of prepayment charges, assumption fees, late payment charges, or otherwise will be retained by the Corporation.

#### Collection and Other Servicing Procedures

The Corporation is responsible for servicing the Mortgage Loans in each Pool and may, as set forth above, conduct such servicing through Lenders or through other Corporation-approved mortgage servicers. In connection with its servicing activities, the Corporation has full power and authority to do or cause to be done any and all things as it may deem necessary or appropriate in its sole discretion, including the foreclosure or comparable conversion of a defaulted Mortgage Loan. In lieu of undertaking any such foreclosure, the Corporation may, in its discretion and without obligation, repurchase from the Trust Fund any Mortgage Loan that is delinquent, in whole or in part, as to four consecutive installments of principal and interest. The purchase price will be equal to the Stated Principal Balance of the delinquent Mortgage Loan together with accrued interest at the Pass-Through Rate (or the Accrual Rate in the case of a GPM or an ARM) and will be distributed to Certificateholders in the same manner as full prepayments of Mortgage Loans. See "Description of Certificates—Payments on Mortgage Loans; Distributions on Certificates." (TI Sections 5.01 and 5.03)

With respect to each Mortgage Loan in a Pool, the Lender makes certain warranties to the Corporation concerning such matters as the recordation of the original Mortgage, the validity of the Mortgage Loan as a first lien on the Mortgaged Property, and compliance by such Mortgage Loan with applicable state and federal laws. In the event of a material breach of any such warranty or a material defect in the Mortgage Loan documentation, the Corporation may withdraw such Mortgage Loan from the Trust Fund at a price equal to its Stated Principal Balance together with interest thereon at the Pass-Through Rate (or the Accrual Rate in the case of a GPM or an ARM). Alternatively, the Corporation may, at its option, for all Pools other than Pools containing Multifamily Mortgage Loans, substitute a new Mortgage Loan for a defective Mortgage Loan; provided, however, that no such substitution may take place more than two years subsequent to the date of the original issue of the related Certificates, and any such substitute Mortgage Loan must satisfy certain eligibility criteria designed to assure that the nature of the Pool will not be altered by any such substitution. Any amount by which the Stated Principal Balance of the defective Mortgage Loan exceeds the principal balance of the substitute Mortgage Loan (the substitute Mortgage Loan may not be larger than the Mortgage Loan it is replacing) will be passed through to Certificateholders.

Subject to the following paragraph and to the extent consistent with then-current policies of the Corporation respecting mortgage loans held in its own portfolio, the Corporation in its discretion may enforce or waive enforcement of any of the terms of any Mortgage Loan or enter into an agreement for the modification of any of the terms of any Mortgage Loan, or take any action or refrain from taking any action in servicing any Mortgage Loan. In such connection, the Corporation may waive any prepayment charge, assumption fee, or late payment charge or may exercise or refrain from exercising any "call option rider"; provided, however, that any decision to exercise or refrain from exercising any "call option rider" must be consistent with then-current policies or practices employed by the Corporation respecting comparable mortgage loans held in its own portfolio and must be without consideration of the ownership status of the related Mortgage Loan.

In the VRM Trust Indenture, the Corporation agrees that any decision as to whether or not (i) to increase a Mortgage Interest Rate (where any such increase is permitted by the terms of such Mortgage Loan and by applicable law) or (ii) to shorten the maturity of any Mortgage Note, will be made in accordance with the then-current practice of the related Lender respecting similar Mortgage Notes and without consideration of the ownership status of the related Mortgage Note. If the Corporation is then directly servicing a VRM, it will increase the related Mortgage Interest Rate and shorten the maturity whenever any such change is permitted by the terms of such Mortgage Loan and by applicable law. Any adjustment downward by reason of a decrease in the applicable index is mandatory. See the Prospectus Supplement for criteria and procedures governing changes in Mortgage Interest Rates.

In connection with the transfer or prospective transfer of title to a Mortgaged Property (other than a Mortgaged Property securing a VRM), the Corporation is obligated to accelerate the maturity of the related Mortgage Loan where that Mortgage Loan contains a "due-on-sale" clause permitting acceleration under those conditions unless the Corporation is restricted by law from enforcing the "due-on-sale" clause or the Corporation elects to withdraw such Mortgage Loan from the Pool. In the case of a VRM, the Corporation will enforce or refrain from enforcing any "due-on-sale" clause in the related Mortgage Note in accordance with the then-current practice of the related Lender without consideration of the ownership status of the Mortgage Note. If the Corporation is then directly servicing the Mortgage Loan, it will enforce the "due-on-sale" clause unless such enforcement is prohibited by law or the Corporation elects to withdraw such Mortgage Loan from the Pool. See "Maturity and Prepayment Assumptions."

In the event that, for any reason, the Corporation is not obligated to accelerate the maturity of a Conventional Mortgage Loan upon the transfer, or prospective transfer, of title to the underlying Mortgaged Property, the Corporation may enter into a transaction by which the obligor is released from liability on the related Mortgage Loan and the transferee assumes such liability; provided, however, that no such transaction shall (i) be entered into which would not have been entered into had the Mortgage Loan been held in the Corporation's own portfolio, (ii) provide for reduction of the Mortgage Interest Rate or, in the case of any ARM, provide for any change in any interest rate adjustment provision or provision governing the calculation of scheduled payments if any such change would be adverse to the interests of Certificateholders, or (iii) in the case of any VRM, provide for any change in the original index applicable thereto.

The Trust Indenture provides that the Corporation may repurchase from the related Pool, at a price equal to the Stated Principal Balance thereof plus accrued interest thereon at the applicable Pass-Through Rate (or the applicable Accrual Rate in the case of a GPM or an ARM), any Mortgage Loan respecting which the underlying Mortgaged Property is transferred, or proposed to be transferred, under circumstances permitting the Corporation to accelerate the maturity of such Mortgage Loan pursuant to the terms of any "due-on-sale" clause contained therein.

#### Certain Matters Regarding the Corporation

The Trust Indenture provides that the Corporation may not resign from its obligations and duties thereunder, except upon determination that those duties are no longer permissible under applicable law. No such resignation will become effective until a successor has assumed the

Corporation's obligations and duties under the Trust Indenture; provided, however, that no successor will succeed to the Corporation's guaranty obligations described above, the Corporation continuing to be responsible thereunder notwithstanding any termination of its other duties and responsibilities under the Trust Indenture. In the event that the Corporation is unable to fulfill its continuing guaranty obligations, the Trust Indenture may be modified to provide for monthly distributions to be made from then-available Mortgage Loan payments and other recoveries in a manner similar to practices and procedures followed in the servicing of whole loans for institutional investors (TI Section 9.01)

The Trust Indenture also provides that neither the Corporation nor any director, officer, employee, or agent of the Corporation will be under any liability to the Trust Fund or to Certificateholders for any action taken, or for refraining from the taking of any action, in good faith pursuant to such Trust Indenture or for errors in judgment; provided, however, that neither the Corporation nor any such person will be protected against any liability that would otherwise be imposed by reason of willful misfeasance, bad faith, or gross negligence or by reason of willful disregard of obligations and duties.

In addition, the Trust Indenture provides that the Corporation is not under any obligation to appear in, prosecute, or defend any legal action that is not incidental to its responsibilities under the Trust Indenture and that in its opinion may involve it in any expense or liability. The Corporation may, however, in its discretion undertake any such legal action that it may deem necessary or desirable in the interests of the Certificateholders. In such event, the legal expenses and costs of such action and any liability resulting therefrom will be expenses, costs, and liabilities of the Corporation that will not be reimbursable to the Corporation out of the Trust Fund. (TI Section 8.02)

Any corporation into which the Corporation may be merged or consolidated, or any corporation resulting from any merger, conversion, or consolidation to which the Corporation is a party, or any corporation succeeding to the business of the Corporation, will be the successor of the Corporation under the terms of the Trust Indenture. (TI Section 9.02)

#### **Events of Default**

Events of Default under the Trust Indenture will consist of (i) any failure by the Corporation to distribute to Certificateholders any required payment that continues unremedied for 15 days after the giving of written notice of such failure to the Corporation by the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than five percent of the related Trust Fund; (ii) any failure by the Corporation duly to observe or perform in any material respect any other of its covenants or agreements in the Trust Indenture which failure continues unremedied for 60 days after the giving of written notice of such failure to the Corporation by the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than 25 percent of the related Trust Fund; and (iii) certain events of insolvency, readjustment of debt, marshalling of assets and liabilities, or similar proceedings and certain actions by or against the Corporation indicating its insolvency, reorganization, or inability to pay its obligations. (TI Section 9.03)

#### Rights Upon Event of Default

As long as an Event of Default under the Trust Indenture for any Issue remains unremedied, the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than 25 percent of the related Trust Fund may, in writing, terminate all of the obligations and duties of the Corporation as Trustee and in its corporate capacity under the Trust Indenture in respect of such Issue (other than its guaranty obligations described above which continue notwithstanding any such termination) and name and appoint, in writing, a successor to succeed to all such responsibilities, duties, and obligations of the Corporation thereunder (other than the Corporation's guaranty obligations) and to the legal title to the Mortgage Loans held in such Trust Fund. (TI Section 9.03)

#### Amendment

The Corporation may amend the Trust Indenture as it relates to any Issue without the consent of or notice to any of the Certificateholders, for one or more of the following purposes: (i) to add to the covenants of the Corporation; (ii) to evidence the succession of another party or parties to the Corporation and the assumption by such successor or successors of the obligations of the Corporation thereunder in its corporate capacity or in its capacity as Trustee or in both such capacities; (iii) to eliminate any right reserved to or conferred upon the Corporation in its corporate capacity; (iv) to make provisions for the purpose of curing any ambiguity or correcting or supplementing any provision in the Trust Indenture or any Issue Supplement, provided such provisions do not adversely affect the interests of any Certificateholder; or (v) to modify the Trust Indenture under the circumstances and for the purposes set forth in the final sentence of the first paragraph under "Certain Matters Regarding the Corporation" above. (TI Section 11.01)

The Corporation may amend the Trust Indenture as it relates to any Issue with the consent of the Holders of Certificates evidencing Fractional Undivided Interests aggregating not less than 66 percent of the related Trust Fund so as to waive compliance by the Corporation with any terms of the Trust Indenture or related Issue Supplement, or to allow the Corporation to eliminate, change, add to, or modify the terms of the Trust Indenture or Issue Supplement. However, no such waiver or amendment may, without the consent of all Certificateholders, terminate or modify the guaranty obligations of the Corporation or reduce the percentages of Certificates the Holders of which are required to consent to any waiver or amendments. In addition, no waiver or amendment shall, without the consent of each Certificateholder affected thereby, reduce in any manner the amount of, or delay the timing of, payments received on Mortgage Loans that are required to be distributed on any Certificate. (TI Section 11.02)

#### **Termination**

The Trust Indenture as it relates to each Issue terminates upon the final payment or liquidation of the last Mortgage Loan remaining in the related Pool and distribution of all proceeds thereof. The Trust Indenture as it relates to each Issue will terminate also upon repurchase by the Corporation, at its option, of all remaining Mortgage Loans in the related Pool at a price equal to 100 percent of the Stated Principal Balance of each such Mortgage Loan together with one month's interest thereon at the Pass-Through Rate (or, in the case of a VRM Pool, one month's interest on the Stated Principal Balance at the Weighted Average Pass-Through Rate, or, in the case of a GPM Pool or an ARM Pool, one month's interest on the Stated Principal Balance of each GPM or ARM, as the case may be, at the applicable Accrual Rate). (TI Section 10.01) The exercise of such option will effect early retirement of the Certificates of that Issue, but the Corporation's right to repurchase is conditioned upon the Pool Principal Balance at the time of repurchase being less than ten percent of the Pool Principal Balance on the Issue Date. In addition, the Corporation has stated that it will be its policy not to exercise any such option in respect of any Pool if (i) it has knowledge that any related Certificate has been pledged to secure an issue of cash flow obligations or is included in a pool underlying an issue of cash flow obligations and (ii) the exercise of such option would take place prior to the earliest date upon which the issuer of such cash flow obligations or the sponsor of such Pool can exercise an option to redeem such obligations or purchase such Certificates without premium. In no event, however, will the trust relating to each Pool as created by the Trust Indenture continue beyond the expiration of 21 years from the death of the last survivor of the persons named in the Trust Indenture. For each Issue, the Corporation will give written notice of termination of the Trust Indenture as it relates to such Issue to each affected Certificateholder, and the final distribution will be made to the person entitled thereto; provided, however, that the final distribution for fully registered Certificates will be made only upon surrender and cancellation of the Certificates at an office of the Corporation specified in the notice of termination. (TI Section 10.01)

#### FEDERAL TAX ASPECTS

This is a discussion of certain federal income tax consequences to persons purchasing Certificates. The discussion does not purport to deal with all aspects of federal taxation that may be relevant to particular investors. Prospective investors are advised to consult their own tax advisors regarding the federal income tax consequences of holding and disposing of Certificates as well as any tax consequences arising under the laws of any state or other taxing jurisdiction.

Revenue Ruling 84-10, 1984-1 C.B. 155, sets forth certain federal income tax consequences relating to investments in the Certificates issued with respect to a Pool. Pursuant to Revenue Ruling 84-10, a Pool will not be classified as an association taxable as a corporation, but will be classified as a trust of which the beneficial owners of the Certificates (the "Owners") are the owners under Subpart E of Part I of Subchapter J of the Internal Revenue Code of 1986, as amended (the "Code"). Each Owner will be treated as the owner of a pro rata undivided interest in the ordinary income and corpus of the trust attributable to that particular Pool and will be considered to be the equitable owner of a pro rata undivided interest in each of the Mortgage Loans included therein, subject to the discussion below concerning a possible recharacterization of a portion of the servicing fee.

Accordingly, Owners of a particular series will be required to report on their federal income tax returns, consistent with their methods of accounting, their pro rata share of the entire income from the Mortgage Loans in that particular Pool, including interest, prepayment penalties, assumption fees and late payment charges attributable to the Mortgage Loans in the Pool, plus any amount paid by the Corporation as interest under its guaranty. Owners will be entitled to deduct their pro rata share of the servicing fee paid to the Corporation, as provided in section 162 or section 212 of the Code, consistent with their methods of accounting and subject to the discussions below.

The deduction for an Owner's share of the Corporation's servicing fee is limited in the case of (i) estates and trusts, and (ii) individuals owning an interest in a Certificate directly or through an investment in a "pass-through entity" (other than in connection with such individual's trade or business). Pass-through entities include partnerships, S corporations, grantor trusts, and mutual funds but do not include estates, nongrantor trusts, cooperatives and real estate investment trusts. Generally, such deduction, when aggregated with certain of the Owner's other miscellaneous itemized deductions, is allowable only to the extent that such aggregate amount exceeds 2 percent of the Owner's adjusted gross income. Adjusted gross income for an estate or nongrantor trust is to be computed in the same manner as in the case of an individual except that deductions for administrative expenses of the estate or trust that would not have been incurred if the property were not held in such trust or estate are treated as allowable in arriving at adjusted gross income.

Owners must also report as ordinary income their pro rata share of any original issue discount on each of the Mortgage Loans in a manner consistent with their methods of accounting unless the special rules of section 1272 of the Code apply. If the special rules of section 1272 of the Code do apply, Owners may be required to include their share of any original issue discount in income before the receipt of cash attributable to that income regardless of their methods of accounting. The special rules of section 1272 of the Code will not apply with respect to Mortgage Loans originated before March 2, 1984 if the mortgagors of such Mortgage Loans were natural persons, but may apply with respect to Mortgage Loans to mortgagors who are natural persons if the Mortgage Loans are originated on or after March 2, 1984.

Under proposed regulations issued by the Treasury Department, certain arrangements in connection with the origination of the Mortgage Loans, such as the charging of points, may give rise to original issue discount subject to the special rules of section 1272 of the Code. In the case of mortgage loans originated after May 8, 1986, the proposed regulations provide that lenders that made the mortgage loans give notice of original issue discount on such mortgage loans at the time

they sell them to the Corporation. The Corporation will report annually to holders of record their share of such original issue discount. However, the Owner's share of any original issue discount is income to the Owner regardless of whether it is reported to the Corporation by the Lender.

With respect to any undivided interest in a Mortgage Loan purchased at a premium, an Owner will be entitled to a deduction for amortization under the rules of section 171 of the Code under an economic accrual method if the Mortgage Loan was originated after September 27, 1985. For Mortgage Loans originated before September 28, 1985, an Owner will be entitled to a deduction for premium amortization under section 171 only if the mortgagor is not an individual and the other conditions for the application of that section prior to its amendment by the 1986 Act are met. If section 171 is inapplicable, such a premium may result in the inclusion by the Owner of a lesser amount of original issue discount under the special rules of section 1272 of the Code.

Owners are advised to consult with their tax advisors as to whether premium or discount results from the acquisition of Certificates. Such premium might be deductible only upon sale or final distribution in respect of the Certificates, and then only as a capital loss.

The Internal Revenue Service also ruled in Revenue Ruling 84-10 as follows:

- 1. A Certificate owned by a domestic building and loan association is considered as representing "loans secured by an interest in real property" within the meaning of section 7701(a)(19)(C)(v) of the Code, provided the real property underlying the Mortgages is (or, from the proceeds of the Mortgage Loans, will become) the type of real property described in that section of the Code.
- 2. A Certificate is considered as representing "qualifying real property loans" within the meaning of section 593(d) of the Code, provided the real property underlying the Mortgages is (or, from the proceeds of the Mortgage Loans, will become) the type of real property described in that section of the Code. Thus, a Certificate owned by a domestic building and loan association or any other thrift institution described in section 593(a) of the Code will represent "qualifying real property loans" within the meaning of section 593(d) of the Code, provided the real property underlying the Mortgages is (or, from the proceeds of the Mortgage Loans, will become) the type of real property described in that section of the Code.
- 3. A Certificate owned by a real estate investment trust is considered as representing "real estate assets" within the meaning of section 856(c)(5)(A) of the Code, and the interest income is considered "interest on obligations secured by mortgages on real property" within the meaning of section 856(c)(3)(B) of the Code.

Although these rulings do not specifically refer to Mortgage Loans involving interest rate buydown accounts, the conclusions reflected in paragraphs 1 and 2 should be generally applicable to an Owner's investment in a Mortgage Loan secured by an interest rate buydown account that conforms with the requirements of the Corporation's MBS Selling and Servicing Guide ("Buydown Mortgage Loan"), and which does not represent an account with the Owner, since the fair market value of the real property securing each Buydown Mortgage Loan would have exceeded the amount of such Buydown Mortgage Loan at the time it was made. Owners and their tax advisors are advised to review section 1.593-11(d) of the Treasury Regulations and to compare Revenue Ruling 81-203, 1981-2 C.B. 137. In the case of the rulings referred to in paragraph 3, an investment in a Buydown Mortgage Loan by a real estate investment trust should also be treated in its entirety as a "real estate asset" within the meaning of section 856(c)(5)(A) of the Code if the fair market value of the real property securing the Buydown Mortgage Loan equals or exceeds the principal amount of such Buydown Mortgage Loan at the time the real estate investment trust makes a commitment to acquire a Certificate. This conclusion is supported by Treasury Regulation section 1.856-5(c)(1)(i), which specifies that if a mortgage loan is secured by both real property and by other property and the value of the real property alone equals or exceeds the a mount of the loan, then all interest income will be treated as "interest on obligations secured by mortgages on real property" within the meaning of section 856(c)(3)(B) of the Code. Since

there are no directly applicable precedents with respect to the federal income tax treatment of investments in Buydown Mortgage Loans, Owners should consult with their tax advisors concerning such tax treatment.

In general, for purposes of sections 1276 and 1277 of the Code, an Owner's interest in a Mortgage Loan will be considered to be acquired at a market discount if the face amount of such interest exceeds the Owner's basis in such interest. Pursuant to section 1276 of the Code, an Owner will be required to include as ordinary income, with respect to any Mortgage Loan originated after July 18, 1984 that is acquired at a market discount, (i) any partial principal payment on such Mortgage Loan to the extent such payment does not exceed the accrued market discount (as defined in section 1276 of the Code) on such Mortgage Loan, and (ii) gain realized on the disposition of such Mortgage Loan or of such Owner's Certificate representing an interest in such Mortgage Loan that is attributable to accrued market discount on such Mortgage Loan to the extent not previously included as ordinary income under section 1276 of the Code. Pursuant to section 1277 of the Code, an Owner's deduction for interest paid or accrued to purchase or carry a Certificate that represents Mortgage Loans acquired (by virtue of the acquisition of the Certificate) at a market discount after July 18, 1984 may have to be deferred to the extent such interest is attributed under section 1277 of the Code to the portion of such market discount that accrued during the taxable year. A deduction for such deferred interest or a portion thereof will. in general, be allowed only when such Mortgage Loans are disposed of or when an Owner disposes of its Certificate. Although the matter is not free from doubt, such a deduction should also be allowed to the extent that such market discount is included in ordinary income by virtue of a partial principal payment. Any gain recognized upon a disposition of a Mortgage Loan originated on or before July 18, 1984 or of a Certificate representing an interest in such Mortgage Loan will have to be recognized as ordinary income to the extent of the deferred interest deduction. The Treasury Department has not yet issued regulations implementing the market discount rules, and Owners should consult their tax advisors regarding the application of these rules as well as the advisability of making any elections relating to such rules.

Owners are advised to consult with their tax advisors as to the possibility that the Mortgage Loans could be treated by the Internal Revenue Service as a collection of "stripped bonds" and "stripped coupons" within the meaning of section 1286 of the Code. A debt obligation becomes a "stripped bond" within the meaning of section 1286 of the Code when the ownership of the right to receive some or all of the interest payments thereon is separated from the ownership of the right to receive some or all of the principal. Interest payments with respect to a stripped bond are "stripped coupons" within the meaning of section 1286 of the Code. The Mortgage Loans could be treated as a collection of "stripped bonds" and "stripped coupons" if the Corporation's servicing fee applicable to a particular Pool were considered by the Internal Revenue Service to exceed reasonable compensation for the services performed and the "excess" portion of such fee were recharacterized as a separate, retained right to receive a portion of the interest payments to be made by mortgagors pursuant to the Mortgage Loans. If the Mortgage Loans were so treated, one consequence may be, in effect, to require the current accrual of market discount and permit the current deduction of premium on the Mortgage Loans (to the extent not otherwise allowable under section 171). Another consequence, if they are so treated, would be that the "excess" portion of such fee would be excluded from the income of the Owners of Certificates and thus would not be subject to the limitations on the deductibility of miscellaneous itemized deductions (discussed above). However, absent Treasury regulations, it is not clear what the applicable rules would be. There are also other possible ways to characterize the "excess" portion of a servicing fee. For example, it is possible that the Internal Revenue Service would recharacterize such a portion as additional purchase price paid under a deferred payment obligation incurred by an Owner at the time such Owner purchased its Certificate representing its individual interest in the Mortgage Loans. In this event, the Owner's initial deductions could be less than the deductions that would have been allowed if the portion of the servicing fee had not been so recharacterized.

The Corporation will furnish to each holder of record with each distribution a statement setting forth the amount of such distribution allocable to principal and to interest. In addition,

the Corporation will furnish or make available, within a reasonable time after the end of each calendar year, to each holder who at any time during such year received a distribution from the Corporation, a statement setting forth such holder's pro rata share of interest received and administrative expense for such calendar year.

Payments of interest and principal, as well as payments of proceeds from the sale of Certificates, may be subject to the "backup withholding" tax under section 3406 of the Code at a rate of 20 percent if the recipient of such a payment is not an "exempt recipient" and fails to furnish certain information, including its taxpayer identification number, to the Corporation or its agent, or otherwise fails to establish an exemption from such tax. Any amounts deducted and withheld from such a payment would be allowed as a credit against the Owner's federal income tax. Furthermore, certain penalties may be imposed by the Internal Revenue Service on a holder or Owner who is required to supply information but who does not do so in the proper manner

Payments made to, or on behalf of, an Owner who is not a U.S. Person (a "Non-U.S. Person") on a Certificate that represents an undivided interest in a Pool of Mortgage Loans all of which were issued after July 18, 1984 generally will be exempt from U.S. federal income and withholding taxes, provided the following conditions are satisfied: (a) such Owner does not hold the Certificate in connection with the conduct by such person of a trade or business in the United States, (b) the Owner is not, with respect to the United States, a personal holding company or a corporation that accumulates earnings in order to avoid U.S. federal income tax, (c) the Owner is not a U.S. expatriate or former U.S. resident who is taxable in the manner provided in section 877(b) of the Code, (d) the Owner is not an "excluded person" (i.e., a 10 percent shareholder of the Corporation within the meaning of section 871(h)(3)(B) of the Code or a "controlled foreign corporation" related to the Corporation within the meaning of section 881(c)(3)(C) of the Code), (e) the Owner signs a statement under penalties of perjury that certifies that it is a Non-U.S. Person or, in the case of an individual, that the Owner is neither a citizen nor resident of the United States, and provides the name, address and taxpayer identification number, if any, of the Owner and (f) the last U.S. Person in the chain of payment to the Owner (the "Withholding Agent") receives such non-U.S. beneficial ownership statement from the Owner or a financial institution holding on behalf of the Owner and does not have actual knowledge that such statement is false. That portion of interest income of an Owner who is a Non-U.S. Person on a Certificate that represents an interest in one or more Mortgage Loans issued before July 19, 1984 will be subject to a U.S withholding tax at the rate of 30 percent or lower treaty rate, if applicable. Regardless of the date of issuance of the Mortgage Loans, backup withholding will not apply to payments made to an Owner that is such a Non-U.S. Person if the Owner or a financial institution holding on behalf of the Owner provides the non-U.S. beneficial ownership statement to the Withholding Agent.

The non-U.S. beneficial ownership statement referred to in the preceding paragraph may be made on an Internal Revenue Service Form W-8 or substantially similar substitute form. The Owner or financial institution holding on behalf of the Owner must inform the Withholding Agent of any change in the information on the statement within 30 days of such change. In all cases, the Form W-8 or substitute form must be filed by the Withholding Agent with the Internal Revenue Service. "U.S. Person" means a citizen or resident of the United States, a corporation, partnership or other entity created or organized in or under the laws of the United States or any political subdivision thereof, or an estate or trust that is subject to U.S. federal income tax regardless of the source of its income.

#### LEGAL OPINION

Any purchaser of Certificates will be furnished upon request an opinion by Caryl S. Bernstein, Esq., Executive Vice President, General Counsel, and Secretary of the Corporation, as to the validity of the Certificates, the applicable Trust Indenture, and the relevant Issue Supplement.

#### ERISA CONSIDERATIONS

The Department of Labor issued a final regulation on November 13, 1986, which provides that in the case where an employee benefit plan ("plan") subject to the Employee Retirement Income Security Act of 1974 ("ERISA") acquires a "guaranteed governmental mortgage pool certificate" then, for purposes of the fiduciary responsibility provisions of ERISA and the prohibited transaction provisions of the Code, the plan's assets include the certificate and all of its rights with respect to such certificate under applicable law, but do not, solely by reason of the plan's holding of such certificate, include any of the mortgages underlying such certificate. Under the regulation, the term "guaranteed governmental mortgage pool certificate" is specifically defined to include a certificate "backed by, or evidencing an interest in specified mortgages or participation interests therein" and with respect to which interest and principal payable pursuant to the certificate are guaranteed by the Corporation. The effect of such regulation is to make clear that the sponsor (that is, the entity that organizes and services the pool, in this case the Corporation), the trustee, and other persons, in providing services with respect to the mortgages in the pool, would not be subject to the fiduciary responsibility provisions of Title I of ERISA, nor be subject to the prohibited transaction provisions of section 4975 of the Code, merely by reason of the plan's investment in a certificate The Corporation has been advised by its counsel, Brown & Wood, that, on the basis of the final regulation and class exemptions previously issued by the Department of Labor, the acquisition from the Corporation and holding of the Certificates by plans are not prohibited either by ERISA or related provisions of the Code.

#### FEDERAL NATIONAL MORTGAGE ASSOCIATION

The Federal National Mortgage Association (the "Corporation" or "Fannie Mae") is a federally chartered and stockholder-owned corporation organized and existing under the Federal National Mortgage Association Charter Act, 12 U.S.C. 1716 et seq (the "Charter Act"). See "Government Regulation and Charter Act." It is the largest investor in home mortgage loans in the United States, with a net portfolio of \$99.2 billion of mortgage loans as of June 30, 1988. The Corporation was originally established in 1938 as a United States government agency to provide supplemental liquidity to the mortgage market and was transformed into a stockholder-owned and privately managed corporation by legislation enacted in 1968.

The Corporation provides funds to the mortgage market by purchasing mortgage loans from lenders, thereby replenishing their funds for additional lending. The Corporation acquires funds to purchase loans from many capital market investors that may not ordinarily invest in mortgage loans, thereby expanding the total amount of funds available for housing. Operating nationwide, the Corporation helps to redistribute mortgage funds from capital-surplus to capital-short areas.

The Corporation also issues mortgage-backed securities ("MBS"). The Corporation receives guaranty fees for its guaranty of timely payment of principal of and interest on MBS certificates. The Corporation issues MBS primarily in exchange for pools of mortgage loans from lenders. The issuance of MBS enables the Corporation to further its statutory purpose of increasing the liquidity of residential mortgage loans. MBS outstanding as of June 30, 1988 totaled \$157.4 billion.

The principal office of the Corporation is located at 3900 Wisconsin Avenue, NW, Washington, DC 20016 (telephone: 202-752-7000).

Copies of the Corporation's most recent annual and quarterly reports and proxy statement are available without charge from Paul Paquin, Vice President for Investor Relations, Fannie Mae. 3900 Wisconsin Avenue, NW, Washington, DC 20016 (telephone: 202-752-7115).

#### **CAPITALIZATION**

The following table sets forth the capitalization of the Corporation as of June 30, 1988.

			•
	Average Maturity	Average Cost(3)	Outstanding
Bonds, notes, and debentures (1): Due within one year			(Dollars in million
Short-term notes Debentures Subordinated capital debentures Other (2)	5 mos. 6 mos. 10 mos.	7 48% 10 91 14.10	\$ 15,305 11,833 335
Total due within one year	_	7.28	$\frac{7,643}{35,116}$
Due after one year Debentures Subordinated capital debentures Other	5 yrs. 1 mo. 10 yrs. 2 mos. 5 yrs. 8 mos.	9 26 9 49 8.03	65,369 1,776 2,496
Total due after one year Total bonds, notes, and debentures	• 11 2	0.00	69,641 \$104,757
Stockholders' equity			\$ 2,005

<sup>(1)</sup> See "Business—Corporate Indebtedness" for a description of certain limitations applicable to debt issued by the Corporation. All amounts shown are net of unamortized discount, as applicable.

The Corporation issues debentures, notes, and other debt obligations frequently. The amount of bonds, notes, and debentures outstanding on any date subsequent to June 30, 1988 may differ from that shown in the table above.

<sup>(2)</sup> Average maturity is indeterminate because the outstanding amount includes investment agreements that have varying maturities.

<sup>(3)</sup> The average cost includes the amortization of discounts, issuance costs, hedging results, and the effect of foreign currency swaps.

#### SELECTED FINANCIAL DATA

The following selected financial data for the years 1983 through 1987 (which data are not covered by the report of independent certified public accountants) have been summarized or derived from the audited financial statements. The financial data for the six months ended June 30, 1988 and 1987 are unaudited and include, in the opinion of management, all adjustments (consisting of normal recurring accruals) necessary for a fair presentation. The results of operations for the six months ended June 30, 1988 are not necessarily indicative of the results expected for the entire year. Data for the period ended June 30, 1987 and the five years ended December 31, 1987 have been restated due to the retroactive implementation of Financial Accounting Standard No. 91, as discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—New Accounting Standard." The data below should be read in conjunction with the audited financial statements and notes to financial statements that are presented elsewhere herein.

## Condensed Statements of Operations (Dollars in millions, except per share amounts)

	En	onths ded e 30,	Year Ended December 31,					
	1988	1987	1987	1986	1985	1984	1983	
Total interest income Interest expense	\$4 984 4 604	\$4,714 4,500	\$9,843 8,953	\$10,107 9,723	\$10,065 9,926	\$8,906 8,996	\$7,980 _7,989	
Net interest income (loss)	380	214	890	384	139	(90)	(9)	
Commitment fees	5	6	11	27	35	17	23	
Guaranty fees	154	119	263	175	112	78	54	
Gain (loss) on sales of mortgages	12	35	(81)	31	11	21	118	
Miscellaneous income, net	28	59	42	56	<b>3</b> 8	36	33	
Provision for losses	(190)	(160)	(360)	(306)	(206)	(86)	(48)	
Administrative expenses	(103)	(87)	(197)	(175)	(142)	(112)	<u>(81</u> )	
Income (loss) before federal income taxes	286	186	568	192	(13)	(136)	90	
Provision for federal income taxes	<u>(64</u> )	<u>(66)</u>	(192)	(87)	6	65	(41)	
Net income (loss)	<b>\$ 222</b>	<b>\$ 120</b>	\$ 376	<b>\$</b> 105	<b>\$</b> (7)	\$ (71)	<b>\$ 49</b>	
Earnings (loss) per share—net	<del></del>							
Primary	<b>\$</b> 282	\$ 1.50	\$ 4.66	\$ 1.44	\$ (.10)	\$(108)	\$ .75	
Fully diluted	2 79	1.49	4.63	1 42	(10)	(1.08)	75	
Cash dividends per share	30	16	36	20	16	.16	.16	

## Condensed Balance Sheets (Dollars in millions)

	Jun	e 30,	December 31,				
	1988	1987	1987	1986	1985	1984	1983
Assets							
Mortgage portfolio, net	\$ 99,235	\$90,299	\$ 93,470	\$93,949	\$94,497	\$84,038	\$75,130
Other assets	12,212	7,049	9,989	5,672	4,579	3,760	3,253
Total assets	\$111,447	\$97,348	\$103,459	\$99,621	\$99,076	\$87,798	\$78,383
Liabilities							
Bonds, notes, and debentures, net							
Due within one year	<b>\$</b> 35 116	\$26,931	\$ 29,718	\$31,294	\$31,939	\$31,261	\$26,860
Due after one year	69 641	64,108	67,339	62,269	62,046	52,458	47.734
Other liabilities	4 685	4,645	4,591	4,876	4,082	3,161	2,789
Total liabilities	109,442	95,684	101,648	98,439	98,067	86.880	77,383
Stockholders' equity	2,005	1,664	1,811	1,182	1,009	918	1,000
Total liabilities and stockholders' equity	\$111,447	<b>\$</b> 97,348	\$103,459	\$99,621	<b>\$9</b> 9,076	\$87,798	\$78,383

## Condensed Statements of Cash Flows (Dollars in millions)

	Six Months Ended June 30,		
	1988	1987	
Net cash provided (used) by operating activities:	<b>\$</b> 391	\$ (249)	
Cash flows from investing activities: Purchases of mortgages Sales of mortgages Mortgage principal repayments	(13,428) 2,133 5,482	(9,155) 2,965 9,922	
Net cash provided (used) by investing activities	(5,813)	3,732	
Cash flows from financing activities:  Cash proceeds from issuance of debt  Cash payments to retire debt net of debt converted to common	31,309	16,629	
stock Other	(23,965) $(30)$	(19,438) 360	
Net cash provided (used) by financing activities	7,314	(2,449)	
Net increase in cash and investments	\$ 1.892	\$ 1,034	

# MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

#### **Annual Periods**

Overview

This discussion and analysis reports on the Corporation's operating results and financial condition for the three years ended December 31, 1987, and should be read in conjunction with the financial statements and related notes presented elsewhere herein. All amounts and percentages in the Corporation's financial statements have been restated to reflect a change in accounting policy, as discussed under "New Accounting Standard."

The Corporation experienced continued earnings growth in 1987, primarily as a result of additional interest income recognized through implementation of Financial Accounting Standard No. 91 ("FAS 91") governing accounting recognition of commitment fees and mortgage purchase discount and improved interest spreads. Earnings also benefited from an increase in fees earned in conjunction with MBS, and a lower effective federal income tax rate. These improvements were offset in part by the continued high level of foreclosure losses, increased administrative expenses, and certain actions taken by management in the fourth quarter.

A summary of selected financial information for the years 1985-1987 follows:

		-	•	.5 1000	100	· IOHOW		ange
	1	987(1)		1986		1985	1987 Over 1986	1986 Over 1985
Operating Results for the Year Ended December 31,	ı	(Dollars i	n mill	lions, exc	ept pe	r share a	mounts)	_
Net interest income Commitment fees Guaranty fees Gain (loss) on sales of mortgages Miscellaneous income, net Provision for losses Administrative expenses Income (loss) before federal income taxes Provision for federal income taxes Net income (loss) Per share:	\$	890 11 263 (81) 42 (360) (197) 568 (192) 376	<b>\$</b>	384 27 175 31 56 (306) (175) 192 (87) 105	\$ 	139 35 112 11 38 (206) (142) (13) 6 (7)	\$ 506 (16 88 (112) (14) (54) (22) 376 (105) \$ 271	63 20 18 (100) (33) 205
Earnings (loss): Primary Fully diluted Cash dividends	\$	4.66 4.63 .36	\$	1.44 1.42 .20	\$	(.10) (.10) .16	\$ 3.22 3.21 .16 % Ch	\$ 1.54 1.52 .04
Financial Condition at December 31,	1	987	1	986	1	985	1987 Over 1986	1986 Over 1985
Mortgage portfolio, net Total assets Borrowings:		3,470 3,459	<b>\$9</b> 3	3,949 9,621		1,497 9,076	(1) <sup>9</sup>	% (1)% 1
Due within one year Due after one year Total liabilities Stockholders' equity MBS outstanding	67 101 1	9,718 7,339 1,648 1,811 9,960	62 98 1	,294 ,269 ,439 ,182 ,174	62 98 1	,939 ,046 ,067 ,009 ,987	(5) 8 3 53 44	(2) - 17 77

<sup>(1)</sup> Amounts for 1987 include a cumulative adjustment to reflect additional interest income associated with a higher level of mortgage repayments as prescribed by the new accounting standard, net of adjustments for certain actions taken by management. Without the cumulative adjustment and the actions taken by management, 1987 net income would have been \$242 million (\$2.98 per share fully diluted).

#### New Accounting Standard

The Financial Accounting Standards Board ("FASB") has issued FAS 91, which requires, beginning in 1988, a change in the timing of the accounting recognition of commitment fees. The Corporation elected to implement the new standard on a retroactive basis in 1987. Under the new standard, commitment fees are deferred and, together with purchase discount, are amortized over the estimated life of the related mortgages using the interest method. Prior to implementation of the new standard, Fannie Mae recognized fee income in the period in which the committing service was rendered.

Under the provisions of FAS 91, when the rate of actual and projected loan prepayments is determined to be materially different from the rate previously assumed in amortizing loan purchase discount and deferred commitment fees, the interest yield on the mortgage loans must be recalculated to give effect to the rate that would have been recorded had the new yield been applied since the loan acquisition date. The resulting adjustment is made to current period interest income and to the net investment in loans. During 1987, the Corporation determined that actual and projected mortgage prepayments substantially exceed the rate assumed previously in reporting the effective yield on mortgage loans. Accordingly, Fannie Mae recorded additional interest income of \$478 million in the fourth quarter of 1987 to reflect current experience and expectations for prepayments. Under the prior method, adjustments to purchase discount to reflect revised prepayment estimates would have been made prospectively.

Although the retroactive deferral of commitment fee income reduced 1987 beginning retained earnings by \$411 million, this reduction was substantially offset by the increase in 1987 earnings, totaling \$342 million on an after-tax basis, resulting from the adjustment discussed above and the amortization during 1987 of retroactively deferred fees. The amortization of accumulated deferred fees as of December 31, 1987 is expected to reduce considerably any adverse effect of deferring and amortizing fees collected in the future.

#### Results of Operations

Fannie Mae earned net income of \$376 million in 1987, compared with \$105 million in 1986 and a loss of \$7 million in 1985. The growth in net income was attributable to increases in net interest income (primarily the increase due to implementation of FAS 91) and guaranty fees. The cumulative adjustment to reflect revised mortgage yields under FAS 91, net of certain actions taken by management, added \$134 million to net income in 1987. Net income also was positively affected by a reduction in the Corporation's effective tax rate from 45 percent to 34 percent.

Actions taken by management in 1987 include the sale of low-yielding assets and the repurchase of high-cost debt. In addition, the Corporation made certain accounting adjustments in the fourth quarter of 1987 consisting primarily of changes in estimating uncollectible interest, a supplement to the provision for losses, and the write-off of previously capitalized software costs.

Management has continued to pursue strategies designed to mitigate the effects of fluctuations in interest rates on financial performance. This objective is being achieved through management of the maturities and repricing characteristics of the Corporation's assets and liabilities. In addition, the issuance of MBS creates an income source without the debt refinancing risk associated with portfolio investing activities. Although the Corporation remains sensitive to changes in interest rates, management believes these strategies have assisted and in the future will continue to assist in minimizing the effect of interest rate fluctuations on earnings.

#### Net Interest Income

A major source of earnings for the Corporation is net interest income, defined as the difference between the interest income derived from interest-earning assets and the interest paid on liabilities incurred to fund those assets. Net interest income was \$890 million in 1987 (\$467 million before the cumulative adjustment due to FAS 91 and certain management actions), compared with \$384 million in 1986 and \$139 million in 1985.

Presented in the following table are selected average balances, interest rates earned and paid, and interest income and expense for the years ended December 31, 1987, 1986 and 1985.

### Net Interest Income and Average Balances

(Dollars in millions)

		1987 1986			1985				
	Average Balance	Interest	Effective Interest Rate(1)	Average Balance	Interest	Effective Interest Rate(1)	Average Balance	Interest	Effective Interest Rate(1)
Interest-earning assets									
Mortgage portfolio, net(2)	\$91,514	\$9,586(3)	10.51%	\$94,280	\$9,991	10.60%	\$90,252	\$9,941	11.01%
Investments	3,681	257	7.63	1,679	116	7.07	1,476	124	8.40
Total interest-earning assets	\$95,195	\$9,843	10.40%(4)	\$95,959	\$10,107	10.54%	\$91,728	\$10,065	10.97%
Interest-bearing liabilities									
Borrowings due within 1 year	\$11,196	\$ 973	8.69%	\$11,794	\$ 880	7.46%	\$14,043	\$1,290	9.19%
Borrowings due after 1 year	80,524	7,980	9.91	80,931	8,843	10.93	75,127	8,636	11.50
Total interest-bearing liabilities	\$91,720	\$8,953	9.76%	<b>\$92,72</b> 5	\$9,723	<u>10.49</u> %	\$89,170	\$9,926	11.13%
Net interest income		\$ 890			\$ 384			\$ 139	
Interest spread						%			(.16)%
Net yield on interest-earning assets			1.00%(4)			.40%			.15%

- (1) Tax equivalent basis.
- (2) Includes nonperforming loans of \$1.5 billion and \$1.4 billion in 1987 and 1986, respectively. Average balance of nonperforming loans in 1985 is not available.
- (3) Includes a cumulative adjustment of \$478 million related to implementation of FAS 91 and a reduction of \$55 million principally due to a revision in the estimate of uncollectible interest.
- (4) Includes .44% relating to the adjustments described in (3).

The table reflects a change in the Corporation's methodology for calculating interest spread to include the average balance and yield associated with short-term investments and mortgages that liquidate during the period. Net yield on interest-earning assets is the difference between the rate of interest on earning assets and the effective rate paid on both interest-bearing and interest-free funds. The new presentation, which has been applied retroactively, is consistent with practice in the financial services industry.

The increase in net interest income in 1987 as compared with 1986 is attributable primarily to the cumulative adjustment under FAS 91 to reflect actual prepayment experience and current prepayment forecasts that are faster than previously expected. A second reason is the decrease in the Corporation's cost of funds due to a continuing lower interest rate environment in 1987. In this environment, as high-cost debt matures, it is refinanced at more favorable rates. The decrease in interest expense was offset in part by a decrease in interest income earned on portfolio assets. Interest income on the mortgage portfolio declined as a result of a lower volume of mortgage purchases and continuing prepayments of high-yielding mortgage assets. These prepayments resulted in a decline in both the average portfolio size and yield. In addition, the Corporation reduced interest income in 1987 through a change in the estimate of uncollectible interest, as discussed below. Income on investments improved due to increased volume and, to a lesser extent, an increase in yield. The increase in net interest income in 1986 as compared with 1985 is attributable primarily to interest rate reductions similar to those occurring in 1987.

The rate/volume analysis below shows the relative contribution of asset growth and interest rate changes to net interest income for the years ended December 31, 1987, 1986, and 1985.

## Rate/Volume Analysis (Dollars in millions)

	•		table to s in (1)
Increase (Decrease)		Volume	Rate
1987 vs. 1986			
Interest income Interest expense	\$(687) (770)	\$ (80) (104)	\$(607) (666)
Effect of accounting changes	83 423 (2)		59 423
Net interest income	<u>\$ 506</u>	\$ 24	\$ 482
1986 vs. 1985			
Interest income Interest expense	\$ 42 (203)	\$ 454 387	\$(412) (590)
Net interest income	\$ 245	<b>\$</b> 67	\$ 178

- (1) Combined rate/volume variances, a third element of the calculation, are allocated to the rate and volume variances based on their relative size.
- (2) Includes a cumulative adjustment of \$478 million related to implementation of FAS 91 and a reduction of \$55 million principally due to a revision in the estimate of uncollectible interest

A loan is classified as nonperforming when a payment is 90 days or more past due. Interest beyond the first 90 days on nonperforming loans is generally included in income only to the extent that payments have been received. In the fourth quarter of 1987, the Corporation revised the estimate of uncollectible interest primarily to include interest accrued on nonperforming loans during the first 90 days of delinquency. This revision reduced interest income by \$55 million. The amounts of nonperforming loans at December 31, 1987, 1986, and 1985 were \$1.35 billion, \$1.5 billion, and \$1.2 billion, respectively. If these assets had been fully performing, they would have contributed an additional \$200 million (increased for the effect of the change in estimate) to interest income in 1987, \$135 million in 1986 and \$105 million in 1985.

#### Other Income

Commitment fees, restated for the effect of implementing FAS 91, are primarily amortized into interest income. The balance of commitment fees, which relates to MBS commitments for which the fee is recognized when received and expired mortgage purchase commitments for which the fee is recognized at expiration, was \$11 million in 1987, compared with \$27 million in 1986 and \$35 million in 1985.

Guaranty fees increased to \$263 million in 1987 from \$175 million in 1986 and \$112 million in 1985. These fees are earned for guaranteeing the timely payment of principal and interest to investors in MBS. The increase in guaranty fee income is due to the increase in the amount of MBS outstanding.

Loss on sales of mortgages in 1987 was \$81 million, compared with gains of \$31 million in 1986 and \$11 million in 1985. These amounts have been restated under FAS 91 to reflect the gain  $\alpha$  loss after adjusting the carrying value of the mortgages sold for deferred fees. Mortgage sale are discussed under the section "The Mortgage Portfolio."

Net miscellaneous income was \$42 million in 1987, as compared with \$56 million in 1986 and \$38 million in 1985. Fees of \$42 million realized for converting MBS to Stripped Mortgage-Backed Securities ("SMBS"), were the primary source of miscellaneous income in 1987. The decrease in 1987 as compared with 1986 was due to adjustments to deferred discount from loan sales upon adoption of FAS 91 and the repurchase of high-cost debt at a premium over the issue price. The increase in 1986 compared with 1985 was due primarily to prepayment fees of \$25 million on certain multifamily loans.

#### Other Expenses

The Corporation evaluates the risk of loss on the mortgage loan portfolio and MBS outstanding based upon experience and current economic conditions. During 1987, charge-offs on mortgages in the Corporation's loan portfolio and mortgages underlying MBS totaled \$285 million, compared with \$201 million in 1986 and \$170 million in 1985. The increases in 1987 and 1986 were due to both higher volumes of foreclosures and increases in the average loss per case. Higher foreclosure losses are due primarily to adverse economic conditions in certain geographical areas. During 1985, Fannie Mae revised its underwriting guidelines and credit requirements for certain of its mortgage products. Management believes these measures should contribute to improved foreclosure experience over the long term.

The provision for losses increased to \$360 million in 1987 from \$306 million in 1986 and \$206 million in 1985. The higher provision for losses in 1987 and 1986 reflects actions taken by management to maintain the allowance for losses at a level it believes is adequate, considering the levels of current and anticipated charge-offs and the higher level of MBS outstanding. In the fourth quarter of 1987, management's assessment included consideration of the uncertain economic outlook resulting from the October stock market decline, which could have an adverse impact on foreclosures. This consideration resulted in a decision to supplement the provision for losses in the fourth quarter by \$25 million.

Administrative expenses increased to \$197 million in 1987 from \$175 million in 1986 and \$142 million in 1985. In 1987, administrative expenses included the write-off of \$16 million of previously capitalized software costs. The increase in 1986 as compared with 1985 was due primarily to an increase in the number of employees required because of business growth and an increased emphasis on quality control and management of foreclosed properties.

#### Income Taxes

Income from tax-advantaged investments and the decrease in federal income tax rates under the Tax Reform Act of 1986 were the primary reasons for the decrease in the effective tax rate to 34 percent in 1987 from 45 percent in 1986 and 46 percent in 1985.

#### The Mortgage Portfolio

The Corporation's net mortgage portfolio totaled \$93.5 billion at December 31, 1987, compared with \$93.9 billion and \$94.5 billion at December 31, 1986 and 1985, respectively. Adjustable-rate mortgages ("ARMs") and intermediate-term mortgages are estimated to represent 37 percent of the portfolio balance at December 31, 1987, up from 33 percent at December 31, 1986 and 24 percent at December 31, 1985. Intermediate-term mortgages consist primarily of fixed-rate mortgages with terms not exceeding 20 years.

During 1987, the Corporation issued \$25.4 billion in mortgage purchase commitments, compared with \$33.0 billion in 1986 and \$20.2 billion in 1985. The reduction in overall commitment volume reflects a reduced consumer demand for refinancing of mortgages.

Mortgage purchases in 1987 were \$20.5 billion as compared with \$30.8 billion and \$21.5 billion in 1986 and 1985, respectively. The primary reason for the decline in purchases in 1987 was the lower level of mortgage refinance activity. In addition, narrower spreads on portfolio purchases in 1987 made the issuance of MBS more attractive than the acquisition of mortgages. Mortgage purchases, particularly fixed-rate products, were at record levels in 1986 due to the large volume

of originations and refinancings. As indicated in the table that follows, purchases of shorter term mortgages, including ARMs, intermediate-term, second, and multifamily mortgages, represented 46 percent of total purchase volume in 1987 as compared with 47 percent in 1986 and 53 percent in 1985. The purchase of these products assists in reducing the risks associated with rising interest rates and in matching more closely the generally shorter maturities of the Corporation's borrowings. The purchase of \$1.5 billion of tax-exempt housing revenue bonds collateralized by government insured or guaranteed mortgages in 1987 is the reason for the increased volume of FHA/VA purchases.

# Mortgage Purchases (Dollars in millions)

							% Ch	ange
	198	1987		1986		1985		1986 Over 1985
	\$ <u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	\$	<u>%</u>		
Mortgage type:								
Single-family:								
FHA/VA	\$ 1,784	8.7%	\$ 438	1.4%	\$ 482	2.3%	307%	(0)0
Conventional:	• -,		,	1.170	₩ <del>2</del> 02	2.0 %	30176	(9)9
30-year fixed-rate	9,223	44.9	16,001	51.9	9,708	45.1	(42)	65
Intermediate-term fixed-	-,		10,001	01.0	3,100	40.1	(42)	69
rate	6,552	31.9	11,453	37.2	2,690	12.5	(43)	326
ARMs	2,512	12.2	1,108	3.6	7,066	32.9	127	(84)
Second mortgages	139	.7	498	1.6	871	4.0	(72)	(43)
Total single-family	20,210	98.4						` '
Multifamily	•		29,498	95.7	20,817	96.8	(31)	42
Mudiamly	321	1.6	1,328	4.3	693	3.2	(76)	92
Total	\$20,531	100.0%	\$30,826	100.0%	\$21,510	100.0%	(33)	43
Average net purchase yield	9.63	% =	9.68	%	11.71	%	(1)	(17)

Mortgage repayments totaled \$15.4 billion in 1987, compared with \$19.6 billion in 1986 and \$9.0 billion in 1985. The high level of repayments in 1987 and 1986, as compared with 1985, were the result of the large number of refinancings that occurred in 1986 and continued through the first half of 1987 in response to the declining level of mortgage interest rates. Prepayments in 1987 aggregated \$13.3 billion, as compared with \$17.5 billion in 1986 and \$7.1 billion in 1985.

Sales from portfolio totaled \$5.2 billion in 1987, compared with \$11.0 billion in 1986 and \$1.3 billion in 1985. The sale of \$1.6 billion of low-yielding loans in the fourth quarter of 1987, conducted as part of the Corporation's continuing strategy to improve future interest spreads on the portfolio, resulted in a loss of \$128 million. The high volume of mortgage sales in 1986 was due to a special \$10 billion asset sale in that year.

### Mortgage-Backed Securities

Through the end of 1987, the Corporation has issued \$189.0 billion of MBS. The issuance of MBS creates a source of guaranty fee income, but without the debt refinancing risk associated with the Corporation's portfolio investing activities.

Most of the Corporation's MBS are issued through lender swap transactions, whereby participating lenders place pools of mortgages in trust in exchange for securities. The increase in MBS issued is due primarily to a higher volume of swap transactions. In addition, the Corporation's sales of mortgage loans from portfolio through MBS contributed significantly to the increase in MBS issued in 1986 and, to a lesser extent, in 1987.

During 1987 and 1986, Fannie Mae also issued SMBS. An SMBS consists of two or more classes of securities. There may be separate classes for principal and interest; alternatively, each class may represent a specified percentage of undivided ownership interest in the principal payments made on a pool of mortgage loans or MBS certificates and a different specified ownership interest of the interest payments on such a pool. Under the traditional MBS program, an investor has an undivided interest in the entire pool of underlying mortgage loans. The issuance of SMBS provides an opportunity to tailor the underlying mortgage flows to meet more closely the needs of different types of investors. The Corporation issued \$8.5 billion of SMBS in 1987 and \$2.4 billion during 1986.

In 1987, Fannie Mae issued \$1.4 billion of real estate mortgage investment conduit securities ("REMICs"). A REMIC is a mortgage pass-through entity that allows multiple classes of securities and is authorized by the Tax Reform Act of 1986. REMIC certificates represent beneficial ownership interests in pools of mortgage loans or MBS. REMICs enable the Corporation to structure securities with differing principal and interest payments and maturities.

The following table summarizes MBS activity, including SMBS and REMICs, for the three-year period ended December 31, 1987. Sellers of pools of mortgage loans may retain the primary default risk on loans comprising the pools or they may elect to transfer this risk to Fannie Mae and, in return, pay a higher guaranty fee. Because the Corporation guarantees timely payment of principal and interest on the MBS, it bears the ultimate risk of default on all MBS pools.

# Summary of MBS Activity (Dollars in millions)

							% Ch	inge
	1987		1986		1985		1987 Over 1986	1986 Over 1985
	<u>\$</u>	<b>%</b>	\$	<u>%</u>	<u>\$</u>	96		
Issuances of MBS:								
Lender originated	\$ 57,078	90%	\$48,886	81%	\$22,331	94%	17%	119%
Fannie Mae originated	6,151	_10	11,680	<u>19</u>	1,318	6	(47)	786
Total	\$ 63,229	100%	\$60,566	100%	\$23,649	100%	4	156
Securities outstanding:								
Fannie Mae risk (1)	\$ 77,558	55%	\$48,626	50%	\$16,660	30%	59	192
Lender risk (2)	62,402	45	48,548	_50	38,327	70	29	27
Total	\$139,960 ———	100%	\$97,174 ———	100%	<b>\$54,987</b>	100%	44	77

<sup>(1)</sup> Included are \$12.2 billion, \$10.6 billion, and \$1.5 billion in 1987, 1986, and 1985, respectively, which are backed by government insured or guaranteed mortgages.

## Sources and Uses of Cash

Fannie Mae's primary sources of cash are mortgage loan repayments, issuance of debt obligations, interest income, fees, and proceeds from the sale of mortgages. Primary uses of cash include the purchase of mortgages, repayment of debt, and payment of interest expense.

<sup>(2)</sup> Included in lender risk are \$10.2 billion, \$3.5 billion, and \$1.1 billion in 1987, 1986, and 1985, respectively, on which Fannie Mae assumes the default risk, but which are backed by collateral in excess of 100% of the principal due.

## Financing Activities

## Debt Issued and Outstanding

In 1987 and 1986, lower interest rates allowed the Corporation to lengthen the maturity of its debt and reduce the average cost of debt outstanding at year-end. The following table sets forth the amount, average cost, and average maturity of debt issued during the last three years, and of the debt outstanding at the end of each of those years.

				% Change	
	1987	1986	1985	1987 Over 1986	1986 Over 1985
Debt Issued During Year	(D	ollars in million	B)		
Amount Average cost Average maturity (months)	\$45,726 7.49% 36	\$39,997 7.10% 47	\$48,244 9.62% 46	14% 5 (23)	(17)% (26) 2
Debt Outstanding at Year-end Amount Average cost Average maturity (months)	\$97,057 9.46% 48	\$93,563 10.01% 46	\$93,985 10.79% 40	4 (5) 4	

In 1987, the Corporation repurchased \$87 million of high-cost debt at a premium of \$12 million over the recorded value.

Fannie Mae continued to attract funds from a global investor base in 1987. In addition to continued overseas demand for Fannie Mae dollar debentures, Canadian dollar and yendenominated liabilities were issued, primarily in the U.S. and Japanese markets. However, direct overseas offerings played a smaller role in the Corporation's financing activities in 1987 and 1986 as compared with 1985 because of the attractive cost of domestically issued debt.

Presented in the table below are certain capital ratios monitored by the Corporation and defined under provisions of the Charter Act and certain subordinated capital debenture agreements.

	1987	1986	1985
Debt-to-capital (1)	22.2:1	28.0:1	28 0 1
Subordinated debt-to-equity	1.2:1	1.5:1	2 1 1(2)

- (1) Capital, for this purpose, includes subordinated capital debentures.
- (2) Prior to restating 1985 retained earnings for the effect of retroactively adopting FAS 91, the Corporation was below the maximum allowed ratio of 2.0:1.

The Secretary of Housing and Urban Development has announced his intention to reduce the Corporation's statutory maximum debt-to-capital ratio to 20:1 by the end of 1988. Management anticipates that this requirement will be met. The Corporation is subject to a restriction in certain subordinated capital debenture agreements, which limits the amount of such debentures outstanding to not more than two times the sum of common stock, additional paid-in capital and retained earnings.

## Common Stock

The Corporation raised \$374 million of additional capital by issuing 8 million shares of common stock at \$48.25 per share in February 1987 through offerings in the U.S. and in Europe. During 1986, the Corporation added \$67.6 million to stockholders' equity by issuing 11,500,000 detachable common stock purchase warrants as part of a debenture offering. In 1985, Fannie Mae added \$107 million to stockholders' equity by issuing 7 million shares of common stock at \$15.32 per share.

In the fourth quarter of 1987, the Corporation announced its intention to repurchase up to 5 million shares of common stock. As of December 31, 1987, 3.2 million shares of common stock had been purchased at an average purchase price of \$29.73 per share. The reacquired shares are included in treasury stock on the balance sheet at an aggregate cost of \$94 million.

Dividends, which are paid quarterly, were \$29 million, \$15 million, and \$11 million in 1987, 1986 and 1985, respectively. The Corporation increased the quarterly dividend to 12 cents per share for the quarters ended September 30, 1987 and December 31, 1987 from 8 cents per share. Prior to the fourth quarter of 1986, the quarterly dividend was 4 cents per share.

### Interim Periods

#### Overview

Fannie Mae's net income for the first half of 1988 was \$222 million, or \$2.79 per common share, an increase of \$102 million over the \$120 million earned in the first half of 1987. The growth in net income results from a wider spread on a larger asset base, increased guaranty fees, and a lower effective tax rate (22 percent as compared with 35 percent) due to income from tax-advantaged investments and to a decrease in the federal tax rate. Profitability was constrained by an increase in the provision for losses and decreases in miscellaneous income and in the gain on sale of mortgages.

Data for the period ended June 30, 1987 have been restated due to the retroactive implementation of Financial Accounting Standard No. 91, as discussed in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—New Accounting Standard."

## Results of Operations

During the first six months of 1988, net interest income was \$166 million higher than in the comparable period in 1987. This 78 percent increase in net interest income reflects the decreased cost of debt outstanding during the first half of 1988. The average cost of debt outstanding during the first half of 1988 was 9.28 percent, compared with 9.89 percent for the first six months of 1987. The improvement in net interest income caused by the decreased cost of debt was offset to some extent by declining yields on the Corporation's mortgage portfolio.

Presented in the following table are selected average balances, interest rates earned ang paid, and interest income and expense for the six months ended June 30, 1988 and 1987.

## Net Interest Income and Average Balances

(Dollars in millions)

	Six Months Ended June 30,							
		1988		1987				
	Average Balance	Interest	Effective Interest Rate (2)	Average Balance	Interest	Effective Interest Rate (2)		
Interest-earning assets								
Mortgage portfolio, net (1) Investments	\$ 96,487 6,272	\$4,750 234	$\frac{9.92\%}{7.94}$	\$91,668 2,548	\$4,631 83	10.11% 7.32		
Total interest-earning assets	\$102,759	\$4,984	9.80%	\$94,216	\$4,714	10.03%		
Interest-bearing liabilities		<u> </u>			<del></del>	<del></del>		
Borrowings due within 1 year	\$ 18,395	<b>\$</b> 757	8.22%	\$10,553	\$ 432	8.18%		
Borrowings due after 1 year	80,796	3,847	9.52	80,192	4,068	10.15		
Total interest-bearing liabilities	\$ 99,191	\$4,604	9.28%	\$90,745	<b>\$4,500</b>	9.92%		
Net interest income		\$ 380	<del></del>		<b>\$</b> 214			
Interest spread			.52%			.11%		
Net yield on interest-earning			==			=		
assets			.84% ==			<u>.48</u> %		

<sup>(1)</sup> Includes nonperforming loans of \$1.3 billion and \$1.6 billion for the six months ended June 30, 1988 and 1987, respectively.

The rate/volume analysis below shows the relative contribution of asset growth and interest rate changes to net interest income for the six months ended June 30, 1988 and 1987.

# Rate/Volume Analysis (Dollars in millions)

	*	Attributable to Changes in (1)		
	Increase (Decrease)	Volume	Rate	
Six months ended 1988 vs. 1987				
Interest income Interest expense	\$270 104	\$420 403	\$(150) (299)	
Net interest income	\$166	<u>\$ 17</u>	\$ 149	

<sup>(1)</sup> Combined rate/volume variances, a third element of the calculation, are allocated to the rate and volume variances based on their relative size.

<sup>(2)</sup> Tax equivalent basis.

## Mortgage Commitment and Purchase Activity

The Corporation issued \$15.5 billion of mortgage purchase commitments in the first half of 1988, compared with \$11.3 billion issued during the first half of 1987. The increase in commitment volume is due to an increase in the Corporation's share of the ARM market, in part because of more aggressive pricing by the Corporation. In October of 1987, the Corporation eliminated its requirement of up-front commitment fees on all mandatory delivery transactions for its standard mortgage products. Commitment fees are amortized over the estimated life of the related mortgages.

During the first six months of 1988, mortgage purchases were \$4.3 billion higher than during the same period in 1987. The primary reason for the increase in purchases was due to the Corporation's increase in ARM market share coupled with an increase in the proportion of ARMs sold in the secondary market. The yield on mortgage purchases was 9.17 percent for the first six months of 1988, compared with 9.24 percent for the first six months of 1987.

## Mortgage-Backed Securities

MBS, including SMBS and REMICs, issued during the first six months of 1988 and 1987, and the balances outstanding at the end of those periods, were as follows:

## Summary of MBS Activity (Dollars in millions)

	June 30, 1988		June 30, 1987		
Issuances of MBS:					
Lender originated	<b>\$</b> 21,845 89	9% \$ 32,815	90%	(33)%	
Fannie Mae originated	2,643 1	3,597	_10	(27)	
Total	\$ 24,488(2) 100	0% \$ 36,412	100%	(33)	
Securities outstanding:			_		
Fannie Mae risk (1)	\$ 83,616 53	3% \$ 65,543	54%	28	
Lender risk	73,822 4	55,727	46	32	
Total	\$157,438(3) <u>100</u>	\$121,270	100%	30	

<sup>(1)</sup> Included are \$11,867 million and \$11,058 million of MBS backed by government-insured loans as of June 30, 1988 and 1987, respectively.

During the first six months of 1988, guaranty fees were \$35 million higher than during the same period in 1987. Guaranty fees increased primarily as a result of a greater amount of MBS outstanding. A total of \$2.1 billion and \$7.5 billion of standard MBS were converted to SMBS for the six months ended June 30, 1988 and 1987. Fees realized for converting standard MBS to SMBS of \$2 and \$41 million in the first six months of 1988 and 1987, respectively, were included in miscellaneous income and were the primary cause of the \$31 million decrease in miscellaneous income during the first six months of 1988 as compared with the first six months of 1987. Gain on sales of mortgages during the first six months of 1988 was \$12 million compared with \$35 million during the first six months of 1987. The decrease is attributable to a smaller volume of sales and to the sale of lower yielding mortgages in 1988 as compared with 1987.

<sup>(2)</sup> Included are \$2,053 million of SMBS and \$5,524 million of REMICs.

<sup>(3)</sup> Included are \$11.8 billion of SMBS and \$6.8 billion of REMICs.

## Provision for Loan Losses

Total foreclosure losses charged off for portfolio loans and MBS were \$157 million in the first six months of 1988 compared with \$129 million in the first six months of 1987. Charge-offs in the first six months of 1988 included \$17 million due to a change in the Corporation's treatment of properties related to Equity Programs Investment Corp. ("EPIC"), which are now recorded at estimated net realizable value. The partnerships that are the mortgagors on most of such EPIC loans are subject to a reorganization plan adopted by the U.S. Bankruptcy Court in 1986. These charge-offs were prompted by a default in payment by TMIC Insurance Company, Inc., a major participant in the plan, which resulted in the Corporation taking possession of a substantial number of EPIC properties.

The higher provision for losses in the first six months of 1988 reflects actions taken by management to maintain the allowance for losses at a level it believes is adequate, considering the levels of current and anticipated charge-offs and the higher level of MBS outstanding.

## Financing and Other Activities

In the first six months of 1988, the Corporation issued \$31.9 billion of debt with an average cost of 7.34 percent and redeemed \$24.0 billion with an average cost of 8.09 percent. In the first six months of 1987, debt issues totaled \$16.8 billion at an average cost of 6.69 percent; debt redemptions totaled \$19.4 billion at an average cost of 8.21 percent. The cost of debt outstanding was 9.18 percent at June 30, 1988, compared with 9.77 percent at June 30, 1987.

On April 19, 1988 the Corporation's Board of Directors voted to increase the dividend on its common stock from 12 cents per share to 18 cents per share for the quarter ended March 31, 1988

### Income Taxes

In December 1987, the FASB issued Financial Accounting Standard No. 96, "Accounting for Income Taxes" ("FAS 96"), which requires, beginning in 1989, that a deferred tax liability or asset be adjusted to reflect changes in tax laws or rates. Management expects that implementation of FAS 96 in 1988 or 1989 will not have an adverse impact on earnings.

#### **GOVERNMENT REGULATION AND CHARTER ACT**

The Corporation is a federally chartered and stockholder-owned corporation organized and existing under the Charter Act (12 U.S.C. 1716 et seq.) whose purpose is to provide supplementary assistance to the secondary market for home mortgages by providing a degree of liquidity for mortgage investments, thereby improving the distribution of investment capital available for home mortgage financing.

The Federal National Mortgage Association originally was incorporated in 1938 pursuant to Title III of the National Housing Act as a wholly owned government corporation and in 1954 under a revised Title III called the Federal National Mortgage Association Charter Act, became a mixed-ownership corporate instrumentality of the United States. From 1950 to 1968, it operated in the Housing and Home Finance Agency or the Department of Housing and Urban Development ("HUD"). Pursuant to amendments to the Charter Act enacted in the Housing and Urban Development Act of 1968 (the "1968 Act"), the then Federal National Mortgage Association was constituted as a federally chartered corporation and the entire equity interest in the Corporation became stockholder-owned. The 1968 Act also partitioned that part of the Federal National Mortgage Association that carried on certain special financing assistance ammanagement and liquidation functions into a separate corporation, the Government National Mortgage Association, a wholly owned corporate instrumentality of the United States within HUD.

Although the 1968 Act eliminated all federal ownership interest in the Corporation, it did not terminate government regulation of the Corporation. Under the Charter Act, approval of the

Secretary of the Treasury is required for the Corporation's issuance of its debt obligations and approval of the Secretary of HUD is required for the Corporation's issuance of stock and securities convertible into stock. Obligations of the Corporation issued under section 304(b) of the Charter Act are subject to limitations imposed by the Charter Act and regulations adopted by HUD. See "Business—Corporate Indebtedness."

In addition to specific enumerated powers, the Secretary of HUD is granted general regulatory power over the Corporation under the Charter Act with authority to promulgate rules and regulations to carry out the purposes of the Charter Act. Also, the Secretary may require, pursuant to the Charter Act, that a reasonable portion of the Corporation's mortgage loan purchases be related to the national goal of providing adequate housing for low- and moderate-income families, but with a reasonable economic return to the Corporation.

While the Charter Act authorizes the Corporation to require entities selling mortgages to it to make nonrefundable capital contributions, as determined from time to time by the Corporation with the approval of the Secretary of HUD and subject to Charter Act restrictions, the Corporation currently imposes no such requirements on mortgage sellers.

The Charter Act requires that each servicer of the Corporation's mortgages own a minimum amount of common stock. The Secretary of HUD must approve stock holding requirements imposed upon such mortgage servicers. The common stock ownership requirement currently is one share.

The Charter Act also gives the Secretary of HUD the authority to audit and examine the books and financial transactions of the Corporation, but this authority has never been exercised.

Thirteen members of the Corporation's eighteen-member Board of Directors are elected by the holders of the Corporation's common stock, and the remaining five members are appointed by the President of the United States. One such appointed director is required to be from each of the home building, mortgage lending, and real estate industries. Any member of the Board of Directors, including a member elected by stockholders, may be removed by the President of the United States for good cause.

In addition to placing the Corporation under federal regulation, the Charter Act also grants to the Corporation certain privileges and immunities. For instance, securities issued by the Corporation are deemed to be "exempt securities" under laws administered by the Securities and Exchange Commission to the same extent as securities that are obligations of, or guaranteed as to principal and interest by, the United States. Registration statements with respect to the Corporation's securities are not filed with the Securities and Exchange Commission. The Corporation also is not required to file periodic reports with the Securities and Exchange Commission.

As described in "Business—Corporate Indebtedness," the Secretary of the Treasury of the United States has discretionary authority to purchase obligations of the Corporation up to a maximum of \$2.25 billion outstanding at any one time. This facility has not been used since the Corporation's transition from government ownership in 1968. Neither the United States nor any agency thereof is obligated to finance the Corporation's operations or to assist the Corporation in any other manner.

The Corporation is exempt from all taxation by any state or by any county, municipality, or local taxing authority except for real property taxes. The Corporation is not exempt from payment of federal corporate income taxes. Also, the Corporation may conduct its business without regard to any qualification or similar statute in any state of the United States or the District of Columbia.

The Federal Reserve Banks are authorized to act as depositaries, custodians, and fiscal agents for the Corporation, for its own account, or as fiduciary.

#### BUSINESS

The Corporation purchases (primarily through its purchase commitments) and holds in portfolio mortgage loans on residential properties. The Corporation obtains funds to purchase mortgage loans from various capital markets. The Corporation also issues MBS.

In this document, whole loans and participation interests in loans both are referred to as "loans," "mortgage loans," and "mortgages." The term "mortgage" also is used to refer to the security instrument securing a loan rather than the loan itself, and when so used also refers to a deed of trust.

Amounts and percentages herein have been restated to reflect a change in accounting policy, as discussed in "Summary of Significant Accounting Policies" in the notes to the financial statements.

## Spread

The Corporation's earnings are based, in part, on the performance of interest-earning assets in terms of the effective interest earned. The table below reflects this performance and a change in the Corporation's methodology for calculating interest spread to include the average balance and yield associated with short-term investments and mortgages liquidated during the period.

For the Month	Total Interest - earning Assets	Effective Interest Rate(1)	Total Interest- bearing Lubilities	Effective Interest Rate(1)	Interest Spread
(Dollars in millions)					
December 1983	\$77,096	10.78%	\$74,470	11.07%	(.29)%
December 1984	84,824	11.00	82,472	11.56	(.56)
December 1985	96,352	10.85	93,738	10.77	.08
December 1986	96,303	10.12	92,962	10.04	.08
1987					
March	94,021	9.99	90,573	9.95	.04
June	93,857	9.88	90,369	9.75	.13
September	95,244	9.86	91,776	9.63	.23
December	99,142	9.87(2)	95,774	9.49	.38
1988					
March	102,013	9.76	98,651	9.28	.48
June	106,807	9.69	102,815	9.17	.52

<sup>(1)</sup> Average investment yield is calculated for the month shown and converted to an annual interest rate using as the numerator interest income on a tax equivalent basis (excluding out-of-cycle adjustments), and as the denominator the average outstanding unpaid investment less unamortized discount and fees. Similarly, the average cost of interest-bearing liabilities is calculated using net interest expense (including the amortization of issuance costs, hedging results and the effect of currency and interest rate swaps) and the average outstanding applicable net indebtedness during the month.

<sup>(2)</sup> Excludes the cumulative adjustment under FAS 91 to reflect prepayment experience. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—New Accounting Standard."

The Corporation is managing the effective maturities and repricing characteristics of its assets and liabilities and has developed its MBS business to reduce its sensitivity to increases in interest rates. The operations and earnings of the Corporation continue to be influenced, however, by the level of interest rates and the availability of alternative sources of mortgage credit.

One of the factors affecting spread is the rate obtained by the Corporation on its refinancing of maturing debt. Approximately \$12.3 billion principal amount at maturity of debt obligations with an original term of one year or longer (having a weighted average cost of 10.97 percent at June 30, 1988) will mature during the 12 months following June 30, 1988. Further information on the maturity profile of the Corporation's debt obligations with an original term of at least one year is contained in "Corporate Indebtedness."

### Mortgage Loan Portfolio

## Mortgage Loans Purchased

The Corporation purchases primarily single-family, conventional, fixed- or adjustable-rate, first mortgage loans, but it also purchases other types of residential mortgage loans for its loan portfolio, including mortgage loans insured by the Federal Housing Administration ("FHA") or the Veterans Administration ("VA"), multifamily mortgage loans and second mortgage loans. The Corporation's purchases currently have a variety of maturities. The Corporation's purchases of adjustable-rate mortgage loans ("ARMs"), fixed-rate loans with intermediate terms (20 years or less), loans secured by second mortgages, and multifamily loans are designed to assist in mitigating the risks associated with rising interest rates, to match more closely the generally shorter maturities of its borrowings, and to provide a secondary market for a variety of loans that may be attractive to potential homeowners.

The composition of the Corporation's loan portfolio and of its loan purchases during the last five years is shown in the table in "Portfolio Composition and Purchases." Of the single-family mortgage loans that the Corporation purchased in 1987, approximately 45 percent were from mortgage banking companies, 19 percent were from savings and loan associations, 16 percent were from commercial and mutual savings banks, and 20 percent were from other companies.

Principal Balance Limits Maximum principal balance limits apply to the Corporation's mortgage loan purchases. The Corporation may not purchase any conventional mortgage loan on a one-family dwelling if its original principal balance exceeds \$168,700, except for loans secured by properties in Alaska and Hawaii. Higher principal balance limits apply to loans secured by two or more family dwelling units. The maximum principal balance limits applicable to the Corporation's conventional mortgage loan purchases increase annually if there have been increases in the national average price of a one-family dwelling in a survey conducted by the Federal Home Loan Bank Board. On January 1, 1988, the limitation for one-family dwellings was raised from \$153,100 to the current level. See "Recent Legislative and Regulatory Developments."

Conventional multifamily mortgage loans that the Corporation purchases are subject to certain maximum principal amounts, as set forth in the Charter Act, based on the number of units in the property being financed and its location.

FHA-insured mortgage loans are subject to statutory maximum amount limitations. The Corporation will not purchase VA-guaranteed mortgage loans that have principal amounts in excess of amounts the Corporation may specify from time to time.

Conventional/FHA/VA. In recent years the Corporation has purchased predominantly conventional mortgage loans (i.e., mortgage loans that are not federally insured or guaranteed). In 1987, approximately 91 percent of the total dollar amount of the Corporation's purchases for

portfolio were conventional mortgage loans. In the first half of 1988, the Corporation's purchases of conventional mortgage loans were 97 percent of the total amount of the loans purchased by the Corporation. The remainder were insured by the FHA or guaranteed by the VA.

The interest rates on ARMs are determined by formulas Fixed-Rate/Adjustable-Rate providing for automatic adjustment, up or down, in accordance with changes in a specified index. Since October 1985, the Corporation has issued commitments to purchase ARMs only if the ARMs have a cap on the amount the interest rate may change. The volume of the Corporation's purchases of ARMs has fluctuated, in part, because the level of interest rates and the difference between the interest rates on fixed-rate loans and the initial interest rates on ARMs with the same maturity influence the number of ARMs originated. As a result of the lower number of ARMs originated and available for purchase during the lower interest rate environment in 1986 and 1987, the Corporation's purchases of ARMs during 1986 and 1987 constituted only 4 percent and 12 percent, respectively, of the amount of loans the Corporation purchased, compared with 33 percent in 1985. In the first half of 1988, the Corporation's purchases of ARMs constituted 47 percent of the amount of loans the Corporation purchased. A substantial number of the ARMs purchased by the Corporation provide the mortgagor with the option, at specified times or during specified periods of time, to convert the ARM to a fixed-rate mortgage loan on payment of a small fee.

Substantially all fixed-rate mortgage loans purchased by the Corporation provide for level monthly installments of principal and interest. The Corporation also purchases some growing equity mortgage loans and graduated payment mortgage loans (one percent of loans purchased in 1987 and in the first half of 1988), which are fixed-rate loans with planned annual increases in the monthly payments over a specified period of time. With a growing equity mortgage loan, the increase in the payment applies solely to principal, resulting in faster amortization. With a graduated-payment mortgage loan, the increase in the payment applies to interest and additions previously made to the original principal balance because payments during the early years did not cover the full amount of interest on the loan at the fixed interest rate. Substantially all ARMs provide for adjustments (up or down) in the amount of monthly installments when the interest rate on the loan is adjusted because of changes in the applicable index. Installments on both fixed-rate loans and ARMs consist primarily of interest during the early and middle years with the major portion of the original principal balance scheduled to be paid during the years immediately preceding maturity.

First Mortgage/Second Mortgage. In addition to mortgage loans secured by first liens on residential properties ("first mortgage loans"), the Corporation also purchases fixed-rate, conventional loans secured by second liens ("second mortgage loans"). Second mortgage loans generally bear higher interest rates and have shorter maturities than first mortgage loans. During 1987 and the first six months of 1988, the Corporation's purchases of second mortgage loans constituted less than one percent of total loans purchased.

Whole Loan/Participation Interest. In addition to purchasing the complete ownership interest in mortgage loans (typically called whole loans), the Corporation also purchases less than 100 percent ownership of mortgage loans (typically called participation interests). The Corporation purchases percentage interests that range from 50 to 95 percent.

Single-Family/Multifamily. The mortgage loans secured by multifamily properties (i.e., properties with more than four dwelling units) that the Corporation purchases are conventional, fixed-rate mortgage loans that typically have a shorter term than mortgage loans secured by one- to four-family properties ("single-family" or "home" loans). During 1987 and the first six months of 1988, the Corporation's purchases of multifamily loans constituted 2 percent and less than one percent, respectively, of the amount of loans it purchased.

Maturity The Corporation currently purchases conventional, fixed-rate, single-family mortgage loans and ARMs with original maturities of up to 30 years, with a minimum of 10 years for ARMs. Prior to 1986, the large majority of the Corporation's single-family conventional loan purchases were 30-year loans. In 1985, the Corporation began to purchase actively 15-year, conventional, fixed-rate mortgage loans. In 1987, the Corporation also began to purchase actively 10- and 20-year conventional, fixed-rate loans and conventional, fixed-rate loans with 7- and 10-year balloon payments but 30-year amortization schedules. Intermediate term loans purchased during the first six months of 1988 constituted 13 percent of the amount of loans purchased by the Corporation. During 1986 and 1987, the Corporation's purchases of intermediate term loans constituted 37 percent and 32 percent, respectively, of its purchases. In February 1988, the Corporation commenced purchasing conventional fixed-rate loans with biweekly payments with original maturities of up to 30 years.

The multifamily mortgage loans that the Corporation currently purchases generally have an effective term not exceeding 15 years. The Corporation owns a significant amount of FHA-insured project loans that had an original maturity of 40 years.

Portfolio Composition and Purchases The following table sets forth the composition of the Corporation's mortgage loan portfolio, purchase activity, and the weighted average yields (net of servicing) on the mortgage loan portfolio and on mortgage loans purchased.

Mortgage Loan Portfolio Composition and Purchases (Dollars in millions)

			Six Months Ended June 30,		Year Ended December 31,					
			1988	1987	1987	1986	<u>1985</u>	1984	1983	
Unpaid Principal Balances at End of Period  Home Government insured or guaranteed		\$ 12,801	\$14,841	\$13,306	\$15,968	\$27,414	\$29,016	\$31,000 32,533		
	Conventional	Fixed-rate Adjustable-rate Second mortgage	62,533 18,860 1,307	57,827 12,613 1,732	61,314 13,722 1,421	58,176 14,343 2,169 4,852	45,065 16,955 2,899 4,951	38,781 11,729 2,817 5,060	7,126 2,386 5,148	
Multifamily	Government i Conventional		4,443 2,521	4,542 2,509	4,482 2,501 \$96,746	2,325 \$97,833	1,365 \$98,649	706 \$88,109	63 \$78 256	
To	otal unpaid bala	ance	\$102,465	\$94,064 10 00%	9.98%	10 17%	10.92%	11.06%	10 85%	
Average net	yıeld		9.81%	1000%	====		<del></del>			
Purchases Dur	ing Period								4 196	
Home:	Government guaranteed Conventional	Insured or i   Fixed-rate   Adjustable-rate   Second mortgage	\$ 367 6,894 6,243 7	\$ 875 7,874 200 83	\$ 1,784 15,775 2,512 139	\$ 438 27,454 1,108 498	\$ 482 12,398 7,066 871	\$ 190 9,544 5,403 937	\$ 186 11,703 4,246 1,408	
Multifamily	Conventiona	1	80 \$ 13,591	252 \$ 9,284	321 \$20,531	1,328 \$30 826	693 \$21,510	\$16,721	2 \$17,557	
	t yield on mort	loans purchased gage loans	9.179	6 9 24%	9.63%	9 68%	11 719	12.89%	12.80%	

At June 30, 1988, the weighted average life (based on the underlying amortization schedules, balloon provisions, and assuming no prepayments) of the mortgage loans in the Corporation's mortgage loan portfolio was approximately 21 years, and the weighted average net yield was 9.81 percent.

## Underwriting Guidelines

The Corporation has established certain underwriting guidelines for purchases of conventional mortgage loans in an effort to reduce the risk of loss from mortgagor defaults. These guidelines are designed to assess the creditworthiness of the mortgagor as well as the value of the mortgaged home relative to the amount of the mortgage loan. The Corporation, in its discretion, accepts deviations from the guidelines. The Corporation generally relies on lender representations to ensure that the mortgage loans it purchases conform to its underwriting guidelines. The Corporation changes these guidelines from time to time.

Generally, the Corporation requires that the unpaid principal amount of each conventional first mortgage loan purchased by it (i) not be greater than 80 percent of the value of the mortgaged property or (ii) if it is greater than 80 percent, that the excess over 75 percent be insured by a mortgage insurance company acceptable to the Corporation for so long as the principal balance of the mortgage loan is greater than 80 percent of such original value (or of the

appraised value as determined by a subsequent appraisal). Under the Charter Act, mortgage insurance is not required on mortgage loans with loan-to-value ratios greater than 80 percent if the mortgage loan seller retains a participation interest in the loan of not less than 10 percent, but the Corporation is requiring mortgage insurance in such cases, except where the lender agrees to repurchase the loan in the event of default. The Corporation generally requires mortgage insurance for second mortgage loans if the combined loan-to-value ratios of the first and second mortgage loans on the property exceed 70 percent.

Because FHA-insured and VA-guaranteed mortgage loans, as a result of their government backing, involve less risk to the Corporation from a credit standpoint, the Corporation's basic eligibility criterion for their purchase is simply the FHA insurance or the VA guaranty.

#### Commitments

The Corporation purchases mortgage loans by issuing commitments, by which it agrees in advance to purchase a specified dollar amount of loans. The Corporation purchases mortgage loans through standard product commitments with posted yields and through negotiated commitments. The Corporation's standard mortgage loan products currently include 10-, 15-, 20- and 30-year fixed-rate mortgage loans, several types of ARMs, and second mortgage loans. The Corporation negotiates commitment terms primarily when the mortgage loans or proposed commitment terms differ in some manner from one or more of the Corporation's standard mortgage loan products or standard commitments.

The Corporation purchases most of its mortgage loans pursuant to mandatory delivery commitments. Under such commitments, lenders are obligated to sell loans to the Corporation at the commitment yield.

The Corporation also issues to lenders standby commitments that commit the Corporation to purchase a designated dollar amount of mortgage loans from the lenders after they convert their standby commitments to mandatory delivery commitments. Until converted, the standby commitments do not obligate the lenders to sell the loans to the Corporation. The yield on the mortgage loans is established at the time of the conversion in the case of "market rate" standby commitments and at the time the lender obtained the commitment in the case of "rate-lock" standby commitments. The combined term of the standby and mandatory commitments currently can be up to 13 months.

Lenders often have paid fees for these commitments, with the amount of the fee depending on market conditions, the type of mortgage loan, and the length and characteristics of the commitment. Effective October 1, 1987, the Corporation eliminated its requirement of "upfront" commitment fees on all mandatory delivery transactions for its standard mortgage products. Concurrently, the Corporation began offering lenders the choice, in selected negotiated transactions for 15- and 30-year fixed-rate conventional mortgage loans, of obtaining a commitment without fees at competitive yields or a commitment at lower yields with fees. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Annual Periods—New Accounting Standard" for a discussion of the standard the Financial Accounting Standards Board issued requiring a change in accounting for commitment fees.

The following table sets forth the Corporation's mortgage loan commitment issuance activity.

# Mortgage Loan Purchase Commitments Issued (Dollars in millions)

			Six Months Ended June 30,		Year Ended December 31,					
			1988	1987	1987	1986	1985	1984	1983	
Нопъе.	Government in Conventional:	nsured or guaranteed Fixed-rate Adjustable-rate Second mortgage	\$ 235 8,490 6,472 179	\$ 851 9,748 533 80	\$ 1,699 17,133 6,252 152	\$ 210 29,910 1,035 461	\$ 197 11,902 6,525 808	\$ 68 11,838 7,072 	\$ 141 10,562 6,573 1,325	
Multife		e mortgage loans	15,376 92 \$15,468	11,212 132 \$11,344	25,236 179 \$25,415	31,616 1,371 \$32,987	19,432 793 \$20,225	20,218 789 \$21,007	18,601 6 \$18,607	

<sup>(1)</sup> Includes standby commitments of \$8.3 billion, \$7.8 billion, \$3.4 billion, \$5.6 billion, and \$3.9 billion in 1987, 1986, 1985, 1984, 1983, respectively and \$3.2 billion and \$3.7 billion for the six months ended June 30, 1988 and 1987, respectively.

At December 31, 1987 and 1986, the Corporation had commitments outstanding to purchase \$4.9 billion and \$3.4 billion, respectively of mortgage loans. Commitments outstanding at June 30, 1988 and 1987 were \$5.4 billion and \$4.4 billion, respectively, including standby commitments of \$2.6 billion at June 30, 1988 and \$3.0 billion at June 30, 1987.

### Servicing

Those who sell single-family mortgage loans and conventional multifamily loans to the Corporation generally retain, subject to the Corporation's guidelines, the responsibility for servicing the mortgage loans sold. With the Corporation's approval, they may transfer responsibility for servicing the loans to others. Servicing includes the collection and remittance of principal and interest payments, administration of escrow accounts, collection of insurance claims, and, if necessary, processing of foreclosures. The Corporation compensates servicers by permitting them to retain a specified portion of each interest payment on a serviced mortgage loan.

The Corporation services the government-insured multifamily loans in its portfolio.

Repayments, Assumptions, and Sales

As shown by the table below, the level of principal repayments in 1987 and 1986 substantially increased from the levels of previous years. Because the majority of mortgage loans in the Corporation's portfolio are prepayable by the borrower (in some cases with a small penalty), the decline in mortgage interest rates experienced in 1986 and during part of 1987 resulted in a significant increase in prepayments of the higher interest rate mortgage loans in the Corporation's loan portfolio. Repayments for the six months ended June 30, 1988 compared with the same period in 1987 decreased by 43 percent. This decrease is primarily due to greater stability of interest rates. In general, when the level of interest rates declines significantly below the interest rates on portfolio mortgage loans, the rate of prepayment is likely to increase, although the rate of principal payments is influenced by a variety of economic, geographic, social, and other factors.

## Mortgage Loan Portfolio Repayments (Dollars in millions)

		Six Months Ended June 30,			Year Ended December 31,					
		1988	1987	1987	<u>1986</u>	1985	1984	1983		
Home Multifamily	Government insured or guaranteed Conventional. Fixed-rate Adjustable-rate Second mortgage . Government insured Conventional	\$ 722 3,696 1,107 121 39 62	\$ 1,150 6,313 1,940 520 60 71	\$ 2,011 10,206 3,143 887 120 150	\$ 2,876 12,396 3,756 1,228 99 382	\$2 090 4 796 1,963 788 109 45	\$1,651 2,846 934 505 81 14	\$2,046 3 474 452 658 110		
	Total mortgage loan repayments (1)	\$5,747	\$10,054	\$16,517	\$20,737	\$9,791	\$6,031	\$6,747		
	nts as a percentage of total unpaid (annualized)	11 5%	21 4%	17.3%	21.1%	10.4%	7.3%	9.0%		

(1) Repayments include \$1,123 million, \$1,142 million, \$835 million, \$648 million and \$537 million in 1987, 1986, 1985, 1984 and 1983, respectively, of loans removed from portfolio as a result of foreclosures. Foreclosures included in repayments were \$666 million for the first six months of 1988, which includes \$92 million related to EPIC properties (see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Interim Periods—Provision for Loan Losses"), and \$592 million for the first six months of 1987.

The Corporation currently enforces "due-on-sale" clauses in conventional fixed-rate mortgages purchased by the Corporation pursuant to commitments issued on and after November 10, 1980 and in conventional mortgages covering properties whose sale has been facilitated by "wraparound" or second mortgages made by institutional lenders. Because a significant portion of the Corporation's fixed-rate portfolio loans (including all FHA and VA loans) do not contain any such clause, the Corporation is unable to prevent assumptions on a significant portion of its portfolio.

The Corporation sold \$1.6 billion of low-yielding loans in the fourth quarter of 1987 to improve future interest spreads on the portfolio. In 1986, the Corporation sold \$11 billion of mortgage loans, including a special \$10 billion sale of mortgage loans that were primarily assumable FHA/VA mortgage loans. The following table shows the unpaid principal balances of mortgage loans sold from portfolio for the years 1983 through 1987 and for the six months ended June 30, 1988 and 1987.

## Mortgage Loan Sales from Portfolio (Dollars in millions)

	Six Months Ended June 30,			Year Ended December 31,				
	1988	1987	1987	1986	1985	1984	1983	
Home Government insured or guaranteed Conventional Fixed-rate Multifamily Government insured	\$ 150 1,979	\$ 849 1,910 250	\$2 <b>43</b> 6 2 528 250	\$ 9,011 1,946 —	\$ <sub>1,319</sub>	\$529 450 —	\$ 907 3,561	
Total sales	\$2,129	\$3,009	\$5,214	\$10,957	\$1 319	\$979	\$4,468	

## Mortgage-Backed Securities

The Corporation issues and guarantees several forms of mortgage-backed securities. MBS are guaranteed mortgage pass-through trust certificates issued by the Corporation that represent beneficial interests in pools of mortgage loans or other MBS. The Corporation serves as trustee for each trust. The pools of mortgage loans or MBS are not assets of the Corporation, nor are the related outstanding securities liabilities of the Corporation. The Corporation, however, is liable under its guaranty to make timely payments to investors of principal and interest on the mortgage loans in the pools, even if the Corporation has not received payments of principal or interest on the loans. MBS enable the Corporation to further its statutory purpose of increasing the liquidity of residential mortgage loans and create a source of guaranty fee income to the Corporation without requiring that the Corporation take the debt refinancing or "spread" risk on the underlying pooled mortgage loans.

The Corporation issues MBS in the form of standard MBS, SMBS (stripped mortgage-backed securities), and REMICs (real estate mortgage investment conduit securities). The Corporation began issuing standard MBS in 1981, SMBS in 1986, and REMICs in 1987. Of the MBS outstanding at June 30, 1988, 88% were standard MBS, 8% were SMBS and 4% were REMICs.

The Corporation's activity in MBS, including SMBS and REMICs, is shown in the following table.

## MBS Issued and Outstanding (Dollars in millions)

	Six Months Ei June 30,			Year Ended December 31, (1)			
	1988	1987	1987	1986	1985	1984	1983
Issued during period Outstanding at period end	\$ 24,488(2) 157,438(3)	•	\$ 63,229 139,960			\$13,546 36,215	\$13,340 25,121

- (1) Excludes MBS that underlie SMBS or REMICs.
- (2) Includes \$2.1 billion of SMBS and \$5.5 billion of REMICs for the six months ended June 30, 1988.
- (3) Includes \$11.8 billion of SMBS and \$6.8 billion of REMICS at June 30, 1988.

With standard MBS, an investor has an undivided interest in a pool of underlying mortgage loans. Interests in the pool are represented by a single class of certificates, so each investor receives a portion of principal and interest payments on the pool equal to his undivided interest in the pool.

A series of SMBS is issued in two or more classes. A class may represent (a) an undivided interest in the principal payments, (b) an undivided interest in the interest payments, or (c) different percentage interests in principal and interest payments, to be made on a pool of mortgage loans or MBS certificates. The Corporation introduced SMBS in 1986 backed by mortgage loans from its portfolio. During 1987, the Corporation began issuing SMBS through swaps of SMBS for standard MBS from lenders and dealers.

The Corporation's REMIC certificates represent beneficial interests in a trust having multiple classes of securities. Each class of REMIC certificates represents different beneficial ownership interests in the corpus of the trust, which consists of pools of mortgage loans or standard MBS. The classes may have different maturities and differing interests in the principal and interest distributions made by the trust. Real estate mortgage investment conduits are mortgage pass-through entities authorized by the Tax Reform Act of 1986. The Secretary of HUD has authorized the Corporation to issue up to \$20 billion of REMICs backed by conventional mortgages through

September 30, 1989. The Corporation also may issue REMICs backed by FHA/VA mortgage loans.

The Corporation issues MBS backed by single-family first mortgage loans with fixed or adjustable rates or multifamily mortgage loans. The mortgage loans may be either conventional or FHA/VA mortgage loans. The conventional mortgage loans are subject to the maximum principal balance limits applicable to the Corporation's purchases as described under "Mortgage Loan Portfolio—Mortgage Loans Purchased—Principal Balance Limits." The mortgage loans also are subject to the same underwriting guidelines as those for mortgage loans purchased for portfolio as described under "Mortgage Loan Portfolio—Underwriting Guidelines," except to the extent compliance with those guidelines is waived by the Corporation. The majority of the Corporation's MBS outstanding represents beneficial interests in conventional fixed-rate mortgage loans on single-family dwellings.

Most MBS are issued in "swap" transactions, in which lenders exchange pools of mortgage loans for MBS. In 1987, certain lenders began exchanging mortgage loans for MBS backed by large pools of loans from more than one lender. Issues of large pool multilender MBS, known as Fannie Majors, totaled \$3.6 billion and \$2.7 billion for the six months ended June 30, 1988 and 1987, respectively. SMBS and REMICs also may be issued in "swap" transactions in which lenders exchange standard MBS for SMBS or REMICs. In addition to "swap" transactions, the Corporation pools mortgage loans from its own portfolio or purchases mortgage loans from lenders in exchange for cash, assembles the mortgage loans in a pool, and sells the related certificates.

The Corporation issues most of its standard MBS and SMBS pursuant to commitments by which it agrees in advance to issue MBS or SMBS in exchange for a specified dollar amount of loans or MBS. Such commitments may be standard product commitments or negotiated commitments. Standard product commitments provide for optional delivery, while negotiated product commitments provide for either mandatory or optional delivery. Under optional delivery commitments, lenders have 180 days to deliver the mortgage loans, although the delivery period can be extended by the Corporation for another 180 days. Under mandatory delivery commitments, lenders must deliver the mortgage loans within specified time periods. The Corporation issued \$65.4 billion and \$72.3 billion in commitments for standard MBS and SMBS in 1987 and 1986, respectively. Commitments issued for the six months ended June 30, 1988 and 1987 were \$30.7 billion and \$43.3 billion, respectively. At June 30, 1988, the Corporation had outstanding \$10.6 billion of mandatory delivery MBS commitments and \$16.7 billion of optional delivery commitments.

Standard MBS and SMBS carry the Corporation's guaranty of timely payment of principal and interest on the underlying pooled mortgage loans, whether or not such payments are received from the mortgagor. In addition, pursuant to its guaranty of REMIC certificates, Fannie Mae is obligated to make timely distribution of required installments of principal and interest and to distribute the principal balance in full by a specified date, whether or not sufficient funds are available in the REMIC trust. Because of the Corporation's guaranties, it assumes the ultimate credit risk of the borrower's default on all mortgage loans in MBS or SMBS pools or that underlie REMICs, as it does for portfolio mortgage loans. The Corporation's risk may be offset somewhat to the extent sellers of pools of mortgage loans elect to remain at risk on the loans sold to the Corporation Lenders are provided an option to assume the credit risk in exchange for paying a lower guaranty fee. At June 30, 1988, \$71.5 billion of the conventional mortgage loans that are part of MBS pools had been acquired with recourse to the sellers in the event of default by the borrowers on the underlying mortgage loans. For further information regarding the primary foreclosure risk category of mortgage loans underlying MBS outstanding at June 30, 1988 and 1987 and year-end 1987, 1986 and 1985, see "Interim Periods-Mortgage-Backed Securities" and "Annual Periods-Mortgage-Backed Securities" in "Management's Discussion and Analysis of Financial Condition and Results of Operations." If the loss rate on conventional mortgage loans in pools should appreciably increase, the Corporation's losses could, to the extent not offset by

recourse to sellers, become significant. For information on the Corporation's loss and delinquency experience on mortgage loans underlying MBS, see "Portfolio and MBS Loan Losses."

The Corporation receives guaranty fees for its standard MBS and MBS underlying SMBS and REMICs. Such fees generally are paid monthly until the underlying mortgage loans have been repaid or foreclosed. For the six months ended June 30, 1988 and 1987, MBS guaranty fees totaled \$154 million and \$119 million, respectively. For the year ended December 31, 1987, MBS guaranty fees totaled \$263 million.

The Corporation also generally receives fees for swapping SMBS and REMICs for standard MBS For the six months ended June 30, 1988 the Corporation earned \$2 million for swapping SMBS for standard MBS, and \$9 million for issuing REMICs. During 1987, the Corporation earned \$42 million in fees for swapping SMBS for standard MBS. No REMICs were swapped for standard MBS in 1987.

In most instances, the lenders that originated the loans in an MBS pool created from the Corporation's portfolio or the lenders that exchanged the loans for the MBS (in the case of a "swap" transaction) initially service the loans, but the Corporation reserves the right to remove the servicing responsibility from a lender at any time if it considers such removal to be in the best interest of MBS certificateholders. In such event, the Corporation finds a replacement lender that will service the loans. The Corporation ultimately is responsible for the administration and servicing of mortgage loans underlying MBS, including the supervision of the servicing activities of lenders, if appropriate, the collection and receipt of payments from lenders, and the remittance of distributions and certain reports to holders of MBS certificates.

## Portfolio and MBS Loan Losses

Allowance and Provision for Loan Losses

Primarily in response to an increase in actual and anticipated charge-offs since 1984, the Corporation has increased the provision for loan losses. The allowance for losses is established by charges to expense (the provision for losses) and is reduced through charge-offs (net of recoveries) of foreclosure losses. See also "Summary of Significant Accounting Policies-Allowance for Losses" in the notes to financial statements. The provision for losses for loans in the portfolio and loans in MBS pools and the allowance for losses thereon are summarized in the following table:

# Portfolio and MBS Allowances and Provisions for Loan Losses

(Dollars in millions)

	Six Mo Ende June	ed.	Year Ended December 31,				
	1988	1987	1987	1986	1985	1984	1983
Provision during period Portfolio: Government insured or guaranteed Conventional MBS Total	\$ 7	\$ 5	\$ 14	\$ 11	\$ 16	\$ 13	\$ 11
	144	131	266	249	161	68	35
	39	24	80	46	29	5	2
	\$190	\$160	\$360	\$306	\$206	\$ 86	\$ 48
Allowance at end of period Portfolio: Government insured or guaranteed Conventional MBS Total	\$ 21	\$ 23	\$ 24	\$ 23	\$ 26	\$ 18	\$ 14
	214	175	191	169	107	92	112
	144	105	131	79	33	20	16
	\$379	\$303	\$346	\$271	\$166	\$130	\$142

Charge-offs

The Corporation has experienced a substantial increase in losses charged off on portfolio and MBS mortgage loans. This increase has resulted both from an increase in the number of loans foreclosed and from a higher average loss per foreclosure. The losses charged off on the conventional loan portfolio and MBS are summarized in the following two tables:

## Portfolio Loan Charge-off Experience (Dollars in millions)

	Six Mor Ende June 3	d.		ber 31,			
	1988	1987	1987	1986	1985	1984	1983
Conventional Loans: Net losses charged off during period(1) Average principal balance during period Net loss charge-off ratio (annualized)	\$ 110(3)	\$ 115	\$ 229	\$ 177	\$ 143	\$ 87	\$ 38
	82,116	75,663	75,948	69,997	60,972	48,101	37,141
	.2679%	.3040%	.3015%	.2529%	.2345%	.1809%	.1023%
Single-Family Conventional Loans (2): Number of foreclosures during period Average number of loans during period Percent foreclosed (annualized)	3,658	3,942	7,870	6,580	6,220	4,664	2,963
	728,788	616,453	634,287	559,264	550,873	539,426	534,515
	1.0039%	1.2789%	1.2408%	1.1765%	1.1291%	0.8646%	0.5543%

- (1) Since September 1983, estimated losses on acquired properties are charged to the allowance for losses when properties are acquired. In September 1983 \$26 million was charged off against the allowance for losses for write-downs to market of properties on hand and for below market financing on sales of acquired properties in all prior periods.
- (2) The number of foreclosures, number of loans and percentages shown are exclusive of loans purchased as participation interests and loans reported in summary format.
- (3) Includes \$17 million related to a change in the Corporation's treatment of EPIC properties, which are now recorded at net realizable value. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Interim Periods—Provision for Loan Losses."

## MBS Loan Charge-off Experience (Dollars in millions)

	Six Months Ended June 30,			Year Ended December 31, (1)								
	1988		19	87	1987		1986		1985		1984	
Net losses charged off during period (2)	\$	37	\$	8	\$	43	\$	9	\$	19	\$	2
Average principal balance during period (2) Net loss charge-off ratio (annualized)		,853 10 <b>91</b> %		,136 )347%		3,179 0809%		048 346%		,219 1859%	-,	680 299%

- (1) Net loss charge-off information for MBS was not available before January 1, 1984. For periods prior to January 1, 1984, loan losses charged off were insignificant.
- (2) Excludes conventional MBS with recourse to lenders and conventional MBS under which the Corporation bears the primary loss risk but where lenders have pledged collateral to cover at least a portion of any losses. Such excluded MBS had a principal balance at December 31 of \$60.1 billion, \$46.4 billion, \$36.6 billion and \$25.2 billion in 1987, 1986, 1985 and 1984, respectively At June 30, 1988 and 1987, excluded MBS had a principal balance of \$71.5 billion and \$53.6 billion, respectively.

## Delinquencies

Delinquencies experienced on conventional mortgage loans in the Corporation's loan portfolio and underlying MBS are summarized in the following tables:

## Portfolio Conventional Loan Delinquency Experience

(Percent of portfolio by number of loans)

	June	30,	December 31,				
Period of Delinquency	1988	1987	1987	1986	1985	1984(2)	1983(2)
One month	3.1%	2.8%	3.2%	3.4%	3.9%	3.6%	3.4%
Two months	.6	.6	.6	.7	.9	.8	.8
Three or more months	8	6	6	8	8	6	5
Total(1)	4.5%	4.0%	4.4%	4.9%	5.6%	5.0%	4.7%
Under special lender forbearance	.3%	.3%	.4%	.3%	.3%	 .4%	<del>=</del> .4%
In foreclosure	.4	.7	.6	.6	.5	.7	.7

- (1) Delinquency percentages exclude loans under special lender forbearance or in foreclosure.
- (2) Delinquency information is not available for portfolio loans reported under the MBS reporting system before December 31, 1985.

### MBS Conventional Loan Delinquency Experience

	June	De	cember 31, (2)			
	1988	1987	1987	1986	1985	
One month	1.7%	1.7%	2.0%	2.5%	3.4%	
Two months	.3	.3	.3	.4	.5	
Three or more months	2	2	2	4	4	
Total(1)	2 2%	2.2%	2.5%	3.3%	4.3%	
In foreclosure	<u></u>	.2%	.2%	.2%	.2%	

- (1) Delinquency percentages exclude loans in foreclosure.
- (2) Delinquency information is not available for MBS before December 31, 1985

REO

The number of properties owned by the Corporation as a result of foreclosures ("REO") has increased significantly. In recent years, the incidence of foreclosures has increased sharply in economically distressed areas that have been economically dependent upon the oil exploration and services industry. The average loss per foreclosure also has increased in these areas as property values have declined. In addition, the number of foreclosures has increased somewhat due to significant growth in the number of portfolio and MBS loans.

Information as to the number of single-family REO properties owned by the Corporation and the carrying value of the properties is contained in the following table:

### Single-Family REO Experience

#### (Dollars in thousands)

	June 30,			December 31,				
	1	988	1987	1987	1986	1985	1984	March 31, 1984(1)
Number of REO (2)		9,437(4	9,334	9,434	8,104	7,701	5,400	3,000
Aggregate carrying value (3)	<b>\$</b> 31	9,000 \$	333,000	\$312,000	\$294,000	\$298,000	\$247,000	\$140,000
Average carrying value (3)	\$	34 \$	36	\$ 33	\$ 36	\$ 39	<b>\$ 46</b>	<b>\$</b> 47

- (1) The Corporation began to compile comparable REO data as of March 31, 1984.
- (2) The number of REO for 1986 and prior years excludes properties acquired upon foreclosure of loans where the Corporation had a participation interest. In 1987, the Corporation began acquiring and managing such properties. As of June 30, 1988, the Corporation held 644 properties in which it had a participation interest. The Corporation believes that the addition of such properties in 1986 and prior years would not have increased the inventory by more than 15 percent.
- (3) The carrying value of a property is the lower of the Corporation's net investment (after deducting any mortgage insurance proceeds) or current estimated net realizable value.
- (4) REO inventory at June 30, 1988 includes 1,223 EPIC properties, 463 of which are in Fannie Mae's active inventory and are currently marketed for sale. The remaining 760 properties are included in the EPIC reorganization plan, which envisions their sale over a period of several years.

## TMIC-Insured Mortgage Loans

Management estimates that as of March 31, 1988, approximately \$2.75 billion of the conventional mortgage loans in the Corporation's portfolio and underlying outstanding MBS issued by the Corporation (including EPIC mortgage loans) were insured by TMIC Insurance Company, Inc. ("TMIC"), formerly Ticor Mortgage Insurance Company. In April 1988, the Superior Court in Los Angeles ordered TMIC's liquidation.

The vast majority of the TMIC-insured loans referred to above are current and being paid as scheduled. In 1987, the Corporation's experience was that slightly more than 2 percent of its conventional mortgage loans covered by mortgage insurance were foreclosed and resulted in mortgage insurance claims. Mortgage insurance generally covers the top 25 percent of the unpaid principal balance of a foreclosed mortgage loan.

Management is attempting to work out arrangements for continuing insurance coverage for TMIC-insured mortgage loans.

#### Competition

The Corporation competes, within the limits prescribed by its Charter Act, in the purchase of mortgage loans for portfolio and the issuance of mortgage-backed securities in the secondary mortgage market. The Corporation competes primarily with savings and loan associations, savings banks, commercial banks, mortgage bankers, government-sponsored corporations, and companies that pool mortgage loans ("conduits") for sale to investors as whole loans or mortgage-backed securities. The number and types of institutions that compete with the Corporation have

increased significantly in recent years, with the substantial increase in the amount of mortgage loans sold in the secondary mortgage market and the growth of mortgage-backed securities.

The Corporation's market share of loans purchased for portfolio is affected by the volume of mortgage loans offered for sale in the secondary market by loan originators and other market participants, the amount purchased by other market participants that compete with the Corporation, and the adequacy of funds to meet the demands of the housing industry. In its purchase of mortgage loans for portfolio, the Corporation competes primarily on the basis of yield, fees, and products and services offered. Competition has been particularly intense for ARMs because many savings and loan associations and other market participants have purchased or retained such loans to better match the terms of their assets and liabilities.

In issuing MBS, the Corporation competes primarily with other companies that issue mortgage-backed securities, including conduits, savings and loan associations, and commercial banks. The Corporation's primary competitor for MBS is the Federal Home Loan Mortgage Corporation, whose primary business consists of the issuance of mortgage-backed securities. The Corporation and the Federal Home Loan Mortgage Corporation compete primarily on the basis of the amount of the guaranty fee charged, the products offered, and differences in such matters as mortgage eligibility standards and delivery requirements. The "Guarantor" program is the Federal Home Loan Mortgage Corporation's program that is comparable to the Corporation's "swap" program. In 1987, the Corporation issued approximately \$56.8 billion in connection with its "swap" program, and the Federal Home Loan Mortgage Corporation issued approximately \$56.7 billion in connection with its "Guarantor" program.

### Corporate Indebtedness

Although the Corporation is stockholder-owned and its obligations are not backed by the United States or any agency or instrumentality thereof other than the Corporation, the Corporation's debt has traditionally been treated as "Federal Agency" debt in the U.S. marketplace. The Corporation, as a result, has historically enjoyed ready access to funds in the U.S. credit markets at rates that are slightly higher than the yields on U.S. Treasury obligations of comparable maturities.

The following table sets forth at June 30, 1988 the maturity profile of the Corporation's debt obligations that were originally issued with a maturity of one year or longer.

Maturing Within	Book Value	Average Cost(1)
	(Dollars in millions)	
One year	<b>\$12,266</b>	10.97%
One to two years	10,221	10.25
Two to three years	12,595	8.81
Three to four years	12,731	8.84
Four to five years	7,044	9.38
Over five years .	24,834	9.27

<sup>(1)</sup> Includes the amortization of issuance costs and hedging results, and the effect of currency and interest rate swaps.

The outstanding indebtedness of the Corporation consists of general unsecured obligations issued under section 304(b) of the Charter Act, subordinated capital debentures (including convertible capital debentures), which are unsecured subordinated general obligations issued under section 304(e) of the Charter Act, and mortgage-backed bonds issued and securities sold under agreements to repurchase under section 304(d) of the Charter Act.

Section 304(b) of the Charter Act provides that the aggregate amount of obligations outstanding under such subsection shall not exceed, at any one time, fifteen times the sum of the

capital (including, for this purpose, capital debentures), capital surplus, general surplus, reserves, and undistributed earnings of the Corporation unless a greater ratio is fixed by the Secretary of HUD. In 1982, the Secretary of HUD increased this ratio to 30:1, but in April 1987 the Secretary advised the Corporation that he would immediately lower the debt-to-capital ratio to 25:1, with the intention of further lowering this ratio to 20:1 by December 31, 1988. Management anticipates that the reduced ratios will be met. Regulations adopted by HUD provide that this ratio is, in the event of a reduction in the Corporation's capital, automatically increased to such ratio as shall be necessary to include all obligations outstanding pursuant to section 304(b). At June 30, 1988, this debt-to-capital ratio was 22.7:1, compared with 22.2:1 at December 31, 1987 and 23.5:1 at June 30, 1987. At June 30, 1988, the Corporation could have issued approximately \$10.5 billion of obligations under section 304(b) of the Charter Act in addition to its then outstanding obligations under that section.

The Corporation is obligated to holders of certain outstanding issues of subordinated capital debentures to maintain the total principal amount of obligations issued under section 304(e) at any one time outstanding at a level not more than two times the sum of (i) the capital of the Corporation represented by its outstanding common stock and (ii) its surplus and undistributed earnings at such time until such outstanding debentures mature or are redeemed. At June 30, 1988, the Corporation's subordinated debt-to-equity ratio was 1.1:1, compared with 1.2:1 at December 31, 1987 and 1.1:1 at June 30, 1987. At June 30, 1988, the Corporation could have issued approximately \$1.9 billion of additional subordinated obligations and still have been in compliance with the 2:1 subordinated debt-to-equity ratio. The latest maturity date of a series of subordinated debentures containing the subordinated debt-to-equity restriction is September 30, 2002, although that series is callable at the Corporation's option beginning in 1988. Other noncallable subordinated obligations containing the subordinated debt-to-equity restriction are scheduled to be outstanding until May 1989. Regulations adopted by HUD provide that, at the maturity or other event requiring the payment or redemption of obligations issued under section 304(e) of the Charter Act, the permitted debt-to-capital ratio is automatically increased as necessary to permit the issuance of obligations under section 304(b) of the Charter Act in an amount sufficient to provide the proceeds required to pay the principal of and interest on the outstanding subordinated obligations required to be paid at such time.

Issuances of indebtedness pursuant to section 304(b) are also subject to the condition that, at the time of any such issuance, the aggregate amount of such indebtedness then outstanding under such section 304(b), after giving effect to the indebtedness being issued, is not greater than the Corporation's ownership, free from any liens or encumbrances, of cash, mortgages or other security holdings and obligations, participations or other investments. Unlike the debt-to-capital ratio limitation described above, this section 304(b) limitation is statutory and may not be waived or varied by the Secretary of HUD. For purposes of each of the foregoing calculations, the Corporation accounts for debt obligations issued at a discount at their book value (face amount less unamortized discount).

Section 304(d) of the Charter Act, pursuant to which MBS and mortgage-backed bonds are outstanding, imposes a requirement with respect to securities issued thereunder that the mortgages pledged or set aside must be sufficient at all times to make timely debt service payments on the securities. There is no other limitation on the amount of MBS and mortgage-backed bonds that may be outstanding.

Section 304(c) of the Charter Act authorizes the Secretary of the Treasury, in his discretion, as a public debt transaction, to purchase obligations of the Corporation up to a maximum of \$2.25 billion outstanding at any one time. This authority has not been used since the Corporation's transition from government ownership. Although the Secretary of the Treasury is authorized to purchase the obligations of the Corporation, the Secretary is under no requirement to do so. Any such obligations purchased by the Secretary of the Treasury must be issued pursuant to section 304(b) of the Charter Act and, accordingly, would be subject to the applicable limitations and restrictions described above.

The following table sets forth the Corporation's borrowing activity and outstanding borrowings, the respective costs of borrowings, and average maturities. The amounts given are book value (face amount less unamortized discount) except for short-term notes, which, because they have a maturity of less than one year, are reported at their face amount.

Debt
(Dollars in millions)

	En	ionths ded e 30,		Year Ended December 31,				
	1988	1987	1987	1986	1985	1984	1983	
Short-Term Notes, Master Notes, Securities Sold under Agreements to Repurchase Residential Financing Securities, and Short-Term Investment Agreements	•						_	
Issued during period:								
Amount	\$24,108	\$ 8,140	\$26,950	\$22,066	\$23,617	\$26,231	\$22,228	
Average cost	6.94%	5.69%	6.84%	6.39%	8.47%	10.92%	9.51%	
Average Maturity—Days(1)	172	117	156	217	240	222	179	
Outstanding at end of period								
Amount	\$23,265	\$11,432	\$15,986	\$13,971	\$17,427	\$16.097	\$13,410	
Average cost	7.41%	6.59%	7.56%	6.40%	8.26%	11.05%	9.73%	
Average Maturity—Days(1)	131	119	149	161	121	127	115	
Debentures, Medium-Term Notes, Bonds, and Long-term Investment Agreements								
Issued during period:								
Amount	\$ 7,786	\$ 8,679	\$18,776	\$17,857	\$24,569	\$21,740	\$17,790	
Average cost	8.54%	7.61%	8.39%	7.95%	10.47%	11.99%	10.74%	
Average Maturity—Months	71	75	75	85	67	51	58	
Outstanding at end of period								
Amount	\$81,907	\$79,685	\$81,341	\$79,745	\$76,768	\$67,992	\$61,477	
Average cost	9.49%	10.01%	9.70%	10.41%	11.17%	11.63%	11.41%	
Average Maturity—Months	54	51	54	49	42	36	35	
Total Debt								
Issued during period.								
Amount	\$31,894	\$16,819	\$45,726	\$39,923	\$48,186	\$47,971	\$40,018	
Average cost(2)	7.34%	6.69%	7.49%	7.10%	9.62%	11.47%	10.07%	
Average Maturity								
Months(1)(2)	22	46	36	47	46	29	29	
Outstanding at end of period.								
Amount	\$105,172	\$91,117	\$97,327	\$93,716	\$94,195	\$84,089	\$74.887	
Average cost(2)	9.18%	9.77%	9.46%	10.01%	10.79%	11.56%	11.12%	
Average Maturity—								
Months(1)(2)	45	49	48	46	40	31	29	
<del></del>								

<sup>(1)</sup> This is calculated exclusive of certain investment agreements for which the average maturity is indeterminate because the balances associated with such investment agreements fluctuate over the life of the agreement.

<sup>(2)</sup> Average cost and maturity of total debt issued and outstanding include the amortization of issuance costs, hedging results, and the effect of currency and interest rate swaps.

### RECENT LEGISLATIVE AND REGULATORY DEVELOPMENTS

The Administration's budget plan for the 1989 fiscal year once again has stated that the Administration is studying ways of "privatizing" the Corporation and the Federal Home Loan Mortgage Corporation. "Privatization" of the Corporation and the Federal Home Loan Mortgage Corporation also was recommended in the report of the President's Commission on Privatization, which was released on March 18, 1988. Alteration of the relationship of the Corporation to the federal government created by the Charter Act would require legislation. A similar recommendation was included in the Administration's budget proposal last year; however, no legislation was introduced. Any change of the Corporation's current relationship with the federal government could require the Corporation to change the manner in which it conducts business and could have a material adverse effect on its results of operations.

In 1987, the Administration sought, but did not obtain, Congressional sponsorship for a proposal to limit permanently the maximum amount of a mortgage loan that the Corporation and the Federal Home Loan Mortgage Corporation could purchase to the lesser of \$153,100 or a dollar amount, determined by the Secretary of HUD, in any housing market that is equal to, or greater than, the 75th percentile of home sale prices in that housing market. (Higher limits would apply to loans secured by residences for more than one family.) Such a standard could reduce significantly the principal balance of loans that the Corporation could purchase in many areas. No such legislation has been introduced to date nor has the Administration presented a revised proposal reflecting the Corporation's increased maximum loan limit of \$168,700 that became effective January 1, 1988.

The Housing and Community Development Act of 1987, signed by the President on February 5, 1988, amends the Charter Act in several respects. It prohibits the imposition of user fees on the Corporation and permanently codifies the authority of the Corporation to purchase second mortgage loans. It authorizes the Corporation to eliminate, with the approval of the Corporation's shareholders and Board of Directors, cumulative voting by shareholders in elections of directors. The legislation also clarifies that the timetable for HUD action on the Corporation's requests for approvals or other action under the Charter Act may not exceed 60 days from the date of the Corporation's submission.

In an April 1987 letter initially approving the Corporation's issuance of REMICs, the Secretary of HUD stated that he plans to recommend legislation that would move the Corporation toward privatization and, as a further condition of his approval, required that the Corporation engage with HUD in a serious study of appropriate privatization legislation. HUD notified the Corporation that the study would focus, in part, on the potential impact on the Corporation and the housing market of modifying or removing one or more of the attributes of the Corporation's agency status. It is impossible to predict what legislative proposals, if any, the Secretary might make as a result of the study. Management will oppose any legislative proposal that does not fully protect the rights of the Corporation's debtholders, shareholders and MBS holders and the interests of the housing and home finance industries and home buyers. Any proposed legislation would have to be enacted by both houses of Congress and signed by the President to become effective. However, management does not believe that the current Congress will enact any such legislation.

The Federal Reserve Board, the Comptroller of the Currency, and the Federal Deposit Insurance Corporation on March 15, 1988 published a revised regulatory proposal for establishing risk-based capital guidelines applicable to banks and bank holding companies. The proposal, for purposes of capital requirements, places obligations of issuers, including those of the Corporation, in one of five different risk categories. The proposal places debt issued and guaranteed by the Corporation and other federal government-sponsored entities in the same risk category (20 percent) as general obligation bonds of state and local governments. The Federal Reserve Board has considered comments submitted by the public regarding the revised regulatory proposal and,

on August 3, 1988, approved the major revisions, including the placement of obligations of the Corporation in the 20 percent risk category. Final guidelines incorporating these revisions are expected to be published by the three federal banking regulators in September.

The Federal Financial Institutions Examination Council has issued a supervisory policy statement applicable to commercial banks, state chartered thrift institutions insured by the Federal Deposit Insurance Corporation, federally regulated credit unions, and the regulators of such institutions with regard to investment in various types of zero coupon and stripped obligations and asset-backed securities residuals. The policy statement (or some variation thereof) has been adopted by the Comptroller of the Currency, the Federal Reserve Board, the Federal Deposit Insurance Corporation and the National Credit Union Administration ("NCUA") with respect to the depository institutions that they regulate. The NCUA also has issued other guidelines regarding investment in such securities by Federal credit unions. In addition, the Federal Home Loan Bank of Chicago has issued a supervisory bulletin regarding the purchase of such securities and the Federal Home Loan Bank Board has been studying the appropriateness of investment by institutions insured by the Federal Savings and Loan Insurance Corporation in such securities. Furthermore, at least three state regulators have adopted regulations designed to prohibit regulated institutions subject to their jurisdiction from holding interest-only stripped mortgage-backed securities, including interest-only securities previously purchased.

As discussed in "Income Taxes" in the notes to financial statements, the Corporation filed suit in the United States Tax Court as a result of a formal deficiency notice filed by the Internal Revenue Service, based on their examination of tax years 1979 through 1982. The Corporation has paid all amounts assessed and the associated accrued interest on the remaining deficiencies; the suit was filed to recover disputed income taxes. In March 1988, the U.S. Tax Court ruled in the Corporation's favor on the issue relating to concurrent mortgage sales and for the IRS on the issue relating to resale/refinance transactions. The Corporation preliminarily estimated that, as a result of the Tax Court decision, the IRS would owe the Corporation interest, which could result in additional interest income of approximately \$140 million, computed as of March 31, 1988. However, both sides in the suit have the right to appeal the decision. The Corporation will not record the income until the result is more certain.

## MANAGEMENT

## Directors

The age and background, as of August 1, 1988, of each of the members of the Board of Directors of the Corporation are as follows:

Name and Age	Principal Occupation, Business Experience, and Residence	First Became Director	Other Directorships(1)
James A. Aliber, 63	Chairman of the Board and Chief Executive Officer, First Federal of Michigan, a savings and loan association, 1978 to present; Birmingham, Michigan	1985	
Samuel W. Bartholo- mew, Jr(2), 44	Chairman, Stokes & Bartholomew, P.A., a law firm practicing in Tennessee, 1977 to present; Nashville, Tennessee	1985	
Felix M. Beck, 62	Chairman of the Board and Chief Execu- tive Officer, Margaretten & Co., Inc., a mortgage banking company, 1969 to present; Livingston, New Jersey	1985	
Roger E. Birk, 58	President and Chief Operating Officer of the Corporation, November 1987 to present; Chairman Emeritus, April 1985 to present, Chairman of the Board, 1981 to April 1985, Chief Executive Officer, 1981 to 1984, and President, 1976 to 1982, Merrill Lynch & Co., Inc., a financial services company; Chairman of the Board, International Securities Clearing Corporation, November 1986 to October 1987; Rumson, New Jersey and Washington, D.C.	1985	Hertz Penske; Mutual of America; New Jersey Re- sources Corporation
Eli Broad, 55	Chairman of the Board and Chief Executive Officer, Kaufman and Broad, Inc., a housing and financial services corporation, 1976 to present; Chairman, Kaufman and Broad Home Corporation, 1986 to present; Chairman and Chief Executive Officer, Sun Life U.S.A., Inc., 1985 to present; Chairman, January 1987 to present, Director, 1979 to present, and President and Chief Executive Officer, 1983 to 1985, Sun Life Insurance Company of America, Inc.; Chairman of the Board, Sun Life Group of America, Inc., a life insurance company, 1978 to present; Los Angeles, California	1984	Anchor National Life Insurance Company
Alberto R. Cardenas(2), 40	Senior Partner, Greenberg, Traurig, Askew, Hoffman, Lipoff, Rosen & Quentel, P.A., a law firm practicing in Florida, July 1987 to present; Partner, Broad and Cassel, a law firm practicing in Florida and Georgia, 1983 to July 1987; Partner, Barrow, Lehman, Cardenas & Picken, a law firm practicing in Florida, 1981 to 1983; Miami, Florida	1985	

Name and Age	Principal Occupation, Business Experience, and Residence	First Became Director	
Henry C. Cashen II(2), 49	Partner, Dickstein, Shapiro & Morin, a law firm practicing in the District of Columbia and New York, 1973 to present; Washing- ton, D.C.	1985	
Joseph P. Hayden, 58	Chairman of the Board and Chief Executive Officer, 1980 to present, and President and Chief Executive Officer, 1961 to 1980, The Midland Company and its subsidiaries, a company engaged in financing, insurance and river transportation; Cincinnati, Ohio	1969	First National Cincinnati Corporation; First Na- tional Bank of Cincinnati
Carla A. Hills, 54	Co-Managing Partner, Weil, Gotshal & Manges, a law firm practicing in the District of Columbia, New York, Texas, and Florida, November 1986 to present; Partner, Latham, Watkins & Hills, a law firm practicing in the District of Columbia, Illinois, and California, 1978 to November 1986; Washington, D.C.	1982	AMR Corporation; Corning Glass Works; International Business Machines Corporation; The Henley Group, Inc.; Chevron Corporation
David O. Maxwell, 58	Chairman of the Board of Directors and Chief Executive Officer of the Corporation, 1981 to present; President and Chief Oper- ating Officer of the Corporation, 1981; Washington, D.C.	1981	Kaufman and Broad, Inc.; Kaufman and Broad Home Corporation
Vance C. Miller (2), 54	Chairman and President, Vance C. Miller Interests, Inc., a real estate development company, 1977 to present; Chairman, Exec- utive Committee, Henry S. Miller Co., a real estate development company, 1980 to present; Dallas, Texas	1986	Grubb & Ellis; Pilgrims Pride Corporation
John M. O'Mara, 60	Managing Director, Chase Manhattan Bank, North American Corporate Finance, a financial services corporation, September 1985 to present; Senior Vice President, Wertheim & Co., investment bankers, 1981 to September 1985; Greenwich, Connecticut	1970	Baldwin & Lyons, Inc.; Global Natural Resources, Inc.; The Midland Com- pany
Samuel J. Simmons, 61	President, The National Caucus and Center on Black Aged, Inc., a non-profit organiza- tion, 1982 to present; housing and real estate consultant, 1981 to present; Washington, D.C.	1978	
Christopher J. Sumner, 42	President, CrossLand Mortgage Company, a mortgage banking corporation, May 1988 to present; President, Chief Executive Officer and Director, CrossLand Savings FSB, a financial institution, 1980 to present; Salt Lake City, Utah	1985	
Richard C. Van Dusen, 63	Chairman, Dickinson, Wright, Moon, Van Dusen & Freeman, a law firm practicing in Michigan and the District of Columbia, 1977 to present; Birmingham, Michigan	1981	CRI Insured Mortgage Investments II; Pennwalt Corporation; Michigan Consolidated Gas Company

Name and Age	Principal Occupation, Business Experience, and Residence	First Became Director	Other Directorships (1)
Mallory Walker, 49	President, Chief Executive Officer and Director, Walker & Dunlop, Inc., a mortgage banking and real estate company, 1976 to present; Washington, D.C.	1 <b>9</b> 81	
Karen Hastie Williams, 43	Partner, Crowell & Moring, a law firm practicing in the District of Columbia, 1982 to present; Washington, D.C.	1988	Crestar Financial Corporation

- (1) Companies with a class of securities registered pursuant to Section 12 of the Securities Exchange Act of 1934 or subject to the requirements of Section 15(d) of that Act or any company registered as an investment company under the Investment Company Act of 1940. Certain directorships of other companies are also noted in the occupation column.
- (2) Appointed by the President of the United States, who has authority to appoint five directors. The President currently has appointed four directors only and may appoint one additional director.

### **Executive Officers**

The age and business experience, as of August 1, 1988, of each of the executive officers of the Corporation, are as follows:

David O. Maxwell, 58, has been Chairman of the Board of Directors and Chief Executive Officer since 1981. He also served briefly as the Corporation's President and Chief Operating Officer in 1981 until his election to his present position.

Roger E. Birk, 58, has been President and Chief Operating Officer of the Corporation since November 1987 and a director of the Corporation since 1985., Mr. Birk was Chairman of the Board of International Securities Clearing Corporation from November 1986 to October 1987. He is Chairman Emeritus of Merrill Lynch & Co., Inc. and served from 1981 to 1985 as Chairman of the Board of Merrill Lynch. Mr. Birk also served as Chief Executive Officer from 1981 to 1984 and President from 1976 to 1982 of Merrill Lynch.

Samuel A. Alward, 57, has been Executive Vice President—Operations and Systems since January 1988. Mr. Alward was Executive Vice President—Technology from May 1987 to December 1987 and President and Chief Executive Officer of the National Mortgage Exchange (Interim) Corporation from November 1986 to May 1987. Prior to his association with the Corporation, Mr. Alward was Executive Vice President of Finance and Administration with the New York Stock Exchange.

Caryl S. Bernstein, 54, has been Executive Vice President since 1982 and General Counsel and Secretary since 1981. Mrs. Bernstein was Senior Vice President from 1981 until her election as Executive Vice President.

J. Timothy Howard, 40, has been Executive Vice President—Asset Management since December 1987. Mr. Howard was Executive Vice President—Economics, Strategic Planning, and Financial Analysis from September 1987 to December 1987, Senior Vice President—Economics and Corporate Planning from November 1985 to September 1987, Senior Vice President and Chief Economist from October 1983 to November 1985, and Vice President and Chief Economist from March 1982 to October 1983. Prior to his employment with the Corporation, Mr. Howard was Vice President and Senior Financial Economist for Wells Fargo Bank from April 1978 to March 1982.

Bruce C. McMillen, 44, has been Executive Vice President and Chief Financial Officer since September 1985. Prior to his employment with the Corporation, Mr. McMillen was Executive Vice President and Chief Financial Officer of BarclaysAmericanCorporation, a diversified financial services company.

Edward J. Pinto, 39, has been Executive Vice President and Chairman—Credit Policy Committee since April 1987 Mr. Pinto was Senior Vice President—Marketing and Product Management from April 1985 to April 1987, and Vice President for Negotiated Transactions from September 1984 to April 1985 Prior to his employment with the Corporation, Mr. Pinto was with Mortgage Guaranty Investment Corporation where he was Capital Markets Program Manager and Senior Legal Counsel and with the Michigan State Housing and Development Authority as Deputy Executive Director of Legal Affairs.

Dale P. Riordan, 40, has been Executive Vice President—Administration and Corporate Relations since February 1986. Mr. Riordan was Senior Vice President—Government Relations from October 1983 to February 1986, Vice President of Government Relations from January 1983 to October 1983, Vice President and Assistant to the Chairman of the Board from April 1982 to January 1983 and Vice President for Strategic Planning from July 1981 to April 1982.

Michael A Smilow, 50, has been Executive Vice President—Marketing and Customer Services since January 1988. Mr. Smilow was Executive Vice President—Mortgage Operations from July 1984 to December 1987. Prior to his employment with the Corporation, Mr. Smilow was Executive Vice President of Mortgage Guaranty Insurance Corporation, a mortgage insurance company. He was also an officer and director of MGIC Investment Corporation and related companies.

Glenn T. Austin, Jr., 40, has been Senior Vice President—Southeastern Regional Office since May 1985. Mr. Austin was Regional Vice President from April 1982 until his election as Senior Vice President. Prior to his employment with the Corporation. Mr Austin was Senior Vice President in charge of field operations at PMI Mortgage Insurance Company.

Douglas M. Bibby, 41, has been Senior Vice President and Assistant to the Chairman of the Board since March 1987. Mr. Bibby was Senior Vice President—Corporate Affairs from October 1983 to March 1987. Prior to his employment with the Corporation, Mr. Bibby was Vice President of Russell Reynolds Associates, Inc., an executive recruiting firm, from September 1982 to October 1983 and was employed for 12 years by J. Walter Thompson Company, where his most recent title was Senior Vice President.

Dennis G. Campbell, 39, has been Senior Vice President—Marketing and Product Management since April 1987. Mr. Campbell was Vice President—Marketing from May 1985 to April 1987, and Senior Assistant Regional Vice President—Northeastern Regional Office—Marketing from February 1983 to May 1985. Prior to his employment with the Corporation, Mr. Campbell was Vice President for Residential Mortgage Lending with the Philadelphia Savings Fund Society during 1982 and 1983.

Larry H. Dale, 42, has been Senior Vice President—Multifamily Activities since June 1987. Prior to his employment with the Corporation, Mr. Dale was Vice President of Newman and Associates from 1984 to June 1987. From 1983 to 1984, he was the managing general partner of Octogon Financial Services and from 1981 to 1983 he was President of Mid-City Financial Corporation.

Judith Dedmon, 37, has been Senior Vice President—Southwestern Regional Office since July 1987. Ms. Dedmon was Senior Vice President—Quality Standards from April 1987 to July 1987, Vice President for Quality Standards from July 1985 to April 1987, and Assistant Regional Vice President—Counsel in the Southeastern Regional Office from September 1982 to July 1985.

Hugh E. Flaherty, 56, has been Senior Vice President—Corporate Affairs since April 1987. Mr. Flaherty was Vice President—Public Relations from August 1984 to April 1987. Prior to his employment with the Corporation, Mr. Flaherty was Director of Public Affairs for The Pittston Company.

- John H. Fulford, III, 39, has been Senior Vice President—Western Regional Office since November 1985. Mr. Fulford was Regional Vice President—Western Regional Office from May 1985 to November 1985 and Senior Assistant Regional Vice President—Marketing from February 1983 to May 1985. Prior to his employment with the Corporation, Mr. Fulford was employed by Ticor Mortgage Insurance Company (now known as TMIC Insurance Company) where his most recent title was Vice President—Director of Marketing Services.
- Charles W. Harvey, Jr., 56, has been Senior Vice President—Northeastern Regional Office since May 1985. Mr. Harvey was Regional Vice President—Northeastern Regional Office from 1973 to May 1985.
- John R. Hayes, 49, has been Senior Vice President—Midwestern Regional Office since November 1985. Mr. Hayes was Regional Vice President—Midwestern Regional Office from 1972 to November 1985.
- G. William Knight, 48, has been Senior Vice President of the Corporation since July 1987 and President and General Manager—Fannie Mae Software Systems since June 1987. Prior to his employment with the Corporation, Mr. Knight was with IBM Corporation in a number of positions. His most recent position was Branch Manager, National Distribution Division.
- Robert J. Levin, 32, has been Senior Vice President—Mortgage-Backed Securities and Portfolio Acquisition since February 1988. Mr. Levin was Senior Vice President—Mortgage-Backed Securities from February 1987 to February 1988, Senior Vice President and Assistant to the Chairman of the Board from May 1986 to February 1987, Senior Vice President—Corporate Finance from November 1985 to May 1986, Vice President for Corporate Finance from July 1984 to November 1985, Director of Corporate Finance from November 1983 to July 1984, Senior Financial Analyst from March 1982 to November 1983.
- Robert J. Mahn, 60, has been Senior Vice President and Controller since June 1985 Mr. Mahn was Senior Vice President—Mortgage Operations from February 1982 to June 1985, and Vice President—Mortgage Operations from June 1981 to February 1982.
- William R. Maloni, 43, has been Senior Vice President—Government Relations since April 1987. Mr. Maloni was Vice President for Government Relations from February 1986 to April 1987, Vice President for Congressional Relations from March 1984 to February 1986, and Director for Congressional Relations from August 1983 to March 1984. Prior to his employment with the Corporation, Mr. Maloni was Special Assistant to the Board of Governors of the Federal Reserve System and Senior Congressional Liaison from February 1981 to August 1983
- Anthony F. Marra, 47, has been Senior Vice President and Deputy General Counsel since April 1987. Mr. Marra held the position of Vice President and Deputy General Counsel from November 1985 to April 1987. Prior to his employment with the Corporation, Mr. Marra was Deputy General Counsel with the Overseas Private Investment Corporation.
- James P. McMann, 49, has been Senior Vice President and Deputy General Counsel since April 1987 and was Vice President and Deputy General Counsel from November 1982 to April 1987.
- Patrick F. O'Neill, 47, has been Senior Vice President—Real Estate Owned since November 1987. Mr. O'Neill was Vice President—Real Estate Sales from November 1986 to November 1987; Director, Real Estate Sales from December 1985 to November 1986; Director of Property Management from March 1984 to December 1985, Director of Auditing from March 1983 to March 1984; and Associate Director of Auditing from December 1979 to March 1983.
- Gary L. Perlin, 37, has been Senior Vice President—Finance and Treasurer since November 1985. Mr. Perlin was Vice President for Risk Management from October 1983 to November 1985, and Director of Hedge Management from February 1982 to October 1983.

David E. Roberts, 47, has been Senior Vice President—Corporate Information Services since November 1985. Prior to his employment with the Corporation, Mr. Roberts was Vice President, Information Management Systems, at Acacia Mutual Life Insurance Company from January 1983 to September 1985 and Vice President, Information Services Department, at Great Southern Life Insurance Company from September 1981 to December 1982.

William A. Schainker, 45, has been Senior Vice President—Special Projects since June 1988. Mr. Schainker was Senior Vice President for Regional Activities from November 1986 until June 1988 and was Acting Senior Vice President for Regional Activities from September 1986 to November 1986. Prior to his employment with the Corporation, Mr. Schainker was Vice President of Kaufman and Broad, Inc. from 1981 to September 1986.

Frank L. Stoler, 37, has been Senior Vice President—Mortgage Operations since February 1988. Prior to his employment with the Corporation, Mr. Stoler was with E.F. Hutton (now Shearson Lehman Hutton, Inc.) in several positions from April 1987 to February 1988. His most recent position was as First Vice President of the Operations/Systems Division. Mr. Stoler was Chief Financial Officer of L.F. Rothschild, Unterberg, Towbin, Inc. from June 1986 to April 1987. From June 1981 to June 1986, he was Director of Corporate Reporting, Controller of the Consumer Markets Group, and Director of Financial Systems for Merrill Lynch & Co., Inc.

### **Employees**

At June 30, 1988 the Corporation employed approximately 2,500 full-time personnel.

## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors and Stockholders Federal National Mortgage Association:

We have examined the balance sheets of Federal National Mortgage Association as of December 31, 1987 and 1986 and the related statements of operations and cash flows for each of the years in the three-year period ended December 31, 1987. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the aforementioned financial statements present fairly the financial position of Federal National Mortgage Association at December 31, 1987 and 1986 and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1987, in conformity with generally accepted accounting principles applied on a consistent basis after restatement for the change, with which we concur, in the method of accounting for mortgage loan commitment fees as described in the summary of significant accounting policies included in the notes to financial statements.

PEAT MARWICK MAIN & Co.

Washington, DC January 22, 1988

## FEDERAL NATIONAL MORTGAGE ASSOCIATION

## STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	1987	1986	1985
•	(Dollars in millions, except per share amount		
Interest income:			
Mortgage portfolio, net of servicing fees	<b>\$</b> 9,586	<b>\$</b> 9,991	\$ 9,941
Investments .	257	116	124
Total interest income	9,843	10,107	10,065
Interest expense	8,953	9,723	9,926
Net interest income	890	384	139
Other income:	<del></del>		
Commitment fees	11	27	35
Guaranty fees	263	175	112
Gain (loss) on sales of mortgages .	(81)	31	11
Miscellaneous, net	42	56	38
Total other income	235	289	196
Other expenses:	<del></del>		
Provision for losses	360	306	206
Administrative	197	175	142
Total other expenses	557	481	348
Income (loss) before federal income taxes	568	192	(13)
Provision for federal income taxes:			(13)
Current	203	228	/1.45
Deferred	(11)	(141)	(14) 8
Not in any (1-a)		87	(6)
Net income (loss)	\$ 376	\$ 105	<b>\$</b> (7)
Per share:	<del></del>	<u> </u>	
Earnings (loss):			
Primary	<b>\$4.66</b>	\$1.44	\$(.10)
Fully diluted Cash dividends	4.63	1.42	(.10)
Cash dividends	.36	.20	.16

See Notes to Financial Statements

## FEDERAL NATIONAL MORTGAGE ASSOCIATION

## BALANCE SHEETS

## Assets

	December 31,	
	1987	1986
	(Dollars in millions)	
Mortgage portfolio, net	\$ 93,470	\$93,949
Cash and investments	5,925	1,862
Accrued interest receivable	811	904
Receivable from currency swaps	1,573	1,054
Acquired property and foreclosure claims, net	416	414
Other assets	1,264	1,438
Total assets	\$103,459	\$99,621
Liabilities and Stockholders' Equity		
Liabilities:		
Bonds, notes, and debentures, net:		
Due within one year	\$ 29,718	\$31,294
Due after one year	67,339	62,269
	97,057	
Accrued interest payable	2,145	93,563 2,305
Payable from currency swaps	2,145 958	2,305 779
Mortgagors' escrow deposits	352	340
Deferred federal income taxes	298	278
Other liabilities	838	1,174
Total liabilities		<del></del>
• • •	101,648	98,439
Stockholders' equity:  Common stock, \$6.25 stated value, no maximum author-		
ization—81,924,206 shares issued in 1987 (73,764,180 shares in 1986)	512	461
Additional paid-in capital	312 777	451 452
Retained earnings	617	269
	<del></del>	
I are two arrays at all at and \$100 400 all arrays in 1000 (0.000)	1,906	1,182
Less treasury stock, at cost—3,198,478 shares in 1987 (2,295 in 1986)	95	
Total stockholders' equity	<del></del>	
• •	1,811	1,182
Total liabilities and stockholders' equity	\$103,459	\$99,621

See Notes to Financial Statements

# STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	1987	1987 1986	
Cash flows from operating activities:		(Dollars in millio	ons)
Net income (loss)	<b>\$</b> 376		<b>.</b>
Noncash and nonoperating items included in income:	\$ 376	<b>\$</b> 105	<b>\$</b> (7)
Interest capitalized on graduated-payment mortgages	(15)	(52)	(140)
Provision for deferred federal income taxes	(10)	\ <i>,</i>	(140)
Provision for losses	360	306	8
Amortization of purchase discount and loan fees	(935)		206
Amortization of discount on short-term notes	413	486	(496)
Increase (decrease) in accrued interest payable	(179)		914
(Increase) decrease in accrued interest receivable	93	13 45	44
(Gain) loss on sales of mortgages	81	_ <del>-</del>	(52)
Net increase (decrease) in other receivables and	01	(31)	(11)
payables .	(4)	(78)	179
Proceeds from mortgagors' escrow deposits	12	12	119
Net cash provided by operations	191	184	664
Cash flows from investing activities:		<del></del>	
Purchases of mortgages	(20.170)	(30,481)	(00.010)
Proceeds from sales of mortgages	5,020	10,868	(20,912)
Mortgage principal repayments	15,398	19,630	1,289
Proceeds from disposition of foreclosed properties	830	•	8,946
Net cash provided (used) by investing activities		869	<u>763</u>
	1,078	886	(9,914)
Cash flows from financing activities:			
Cash proceeds from issuance of debentures	17,641	17,812	23,512
Cash payments to redeem debentures net of debt		,	,
converted to common stock	(17,563)	(14,972)	(15,833)
Cash proceeds from issuance of short-term debt	27,421	21,637	23,900
Cash proceeds from investment debt	(24,955)	(25,667)	(22,386)
Cash proceeds from issuance of common stock and detachable common stock purchase warrants	050		
Cash payments for repurchase of common stock	378	68	108
Dividends paid	(99)	_	_
- · · · · · · · · · · · · · · · · · · ·	(29)	$\underline{\hspace{1cm}}$	(11)
Net cash provided (used) by financing activities	2,794	(1,137)	9,290
Net increase (decrease) in cash and investments	\$ 4,063	\$ (67)	\$ 40
			<del></del>

See Notes to Financial Statements

#### NOTES TO FINANCIAL STATEMENTS

#### Summary of Significant Accounting Policies

Fannie Mae is a federally chartered and stockholder-owned Corporation operating in the residential mortgage finance industry. Certain amounts in prior years' financial statements have been reclassified to conform with the current presentation. The Corporation has adopted Financial Accounting Standard No. 95 ("FAS 95"), which requires for fiscal years ending after July 15, 1988 that a statement of cash flows be provided in place of the statement of changes in financial position. In addition, prior years' financial statements have been restated to reflect the retroactive implementation of Financial Accounting Standard No. 91 ("FAS 91"), as described below.

#### Change in Accounting

Prior to 1987, the Corporation generally recognized commitment fee income upon execution of the commitment contract. In December 1986, the Financial Accounting Standards Board issued FAS 91, which requires that most commitment fees be treated as an adjustment to interest income and amortized over the life of the related mortgages. In addition, under FAS 91 mortgage yields should be recalculated based on current and projected prepayments with any adjustment reflected in current period earnings. In the fourth quarter of 1987, the Corporation implemented FAS 91 by electing to apply the provisions retroactively and restating all prior years presented. Accordingly, the majority of commitment fees recorded in prior periods were retroactively deferred and amortized. The effect of this accounting change on certain elements of income in 1987 and as previously reported in 1986 and 1985 is as follows:

	Iz	Increase (Decrease)				
	1987	1986	1985			
Effect on:	(1	(Dollars in millions)				
Net interest income	. \$ 570	\$ 80	<b>\$</b> 68			
Commitment fees	(90)	(252)	(161)			
Net income	290	(78)	(44)			
Earnings per share:		` ,	(,			
Primary	3.60	(1.06)	(.62)			
Fully diluted	3.57	(1.04)	(.62)			

The balances of retained earnings for 1987, 1986 and 1985 have been adjusted for the effect (net of income taxes) of retroactively applying the new standard as shown below.

	1987	1986	1985
Retained earnings:		(Dollars in millions)	
Balance at beginning of year, as pre- viously reported	\$ 680	\$ 512	\$ 486
Cumulative effect of FAS 91	(411)	(333)	(289)
Balance at beginning of year, as adjusted	269	179	197
Net income (loss)	376	105	(7)
Dividends	(28)	<u>(15)</u>	(11)
Balance at end of year	\$ 617	<b>\$ 269</b>	\$ 179

## NOTES TO FINANCIAL STATEMENTS—(Continued)

### Mortgage Portfolio

Mortgages acquired for investment are carried at their unpaid principal balances less unamortized purchase discount and deferred loan fees. Discount and deferred loan fees are recognized as income using the interest method over the estimated life of the related mortgages. The accrual of interest on conventional mortgages is discontinued and deemed uncollectible when the mortgages become 90 days delinquent. Interest income on these mortgages is recognized only to the extent of cash payments received. Beginning in the fourth quarter of 1987, any accrued but uncollected interest on delinquent mortgages is reversed against current period interest income. Changes in estimating uncollectible interest reduced 1987 interest income by \$55 million.

### Guaranteed Mortgage-Backed Securities

The Corporation guarantees the timely payment of principal and interest on Mortgage-Backed Securities ("MBS"). These securities, which include multiple class securities such as Stripped Mortgage-Backed Securities ("SMBS") and real estate mortgage investment conduits ("REMICs"), represent interests in pools of mortgages held in trust by the Corporation. The mortgages are not assets of the Corporation; nor are the outstanding securities liabilities of the Corporation; accordingly, neither is reflected in the accompanying balance sheets.

#### Allowance for Losses

The allowance for losses on the conventional mortgage portfolio is maintained at a level that, in management's judgment, is adequate to provide for estimated losses. This judgment is based on such factors as economic conditions, geographic concentrations, and actual loan loss experience. The allowance is increased by provisions charged to expense and decreased by charge-offs, net of recoveries.

The Corporation establishes an allowance for losses on U.S. Government insured or guaranteed loans when foreclosure appears probable. At that time, an allowance is recorded to provide for estimated unreimbursable foreclosure losses.

A liability for estimated losses is maintained for MBS because the Corporation has assumed the ultimate foreclosure loss risk on the underlying mortgages. Provisions for losses are recorded to maintain the liability at an adequate level. When mortgages are sold from portfolio into MBS, the related allowance is transferred.

#### Acquired Property

Real estate acquired as a result of foreclosure and held for sale is carried at the lower of the investment in the property or its estimated net realizable value.

### Gain (Loss) on Sales of Mortgages

Gain or loss is recognized on sales of mortgages or MBS at the time of sale to the extent the sales proceeds exceed or are less than the book value of the assets sold. An adjustment to the gain or loss is recognized in an amount measured by the present value of the effective loan interest rate to the Corporation less the investor pass-through rate and a normal guaranty fee.

#### Risk Management

The Corporation takes positions in financial markets to hedge against fluctuations in interest rates that may affect the cost of certain planned borrowings or the yield on certain mortgage purchases. Results of hedging activities are deferred and amortized against interest expense or interest income over the lives of the related borrowings or assets. During 1987 and 1986, the Corporation also hedged the sales of certain MBS. The gain or loss resulting from such sales was adjusted to reflect the hedge results.

### NOTES TO FINANCIAL STATEMENTS—(Continued)

#### Securities Sold Under Agreements to Repurchase

The Corporation enters into sales of securities under agreements to repurchase. Such transactions are treated as financings, and the obligations to repurchase securities sold are reflected as liabilities in the balance sheet. The mortgage securities underlying the agreements remain in the asset accounts.

#### Foreign Currency Translation

Foreign currency denominated borrowings and the related receivables from currency swaps are translated at the market rates of exchange as of the end of the period.

#### Income Taxes

Certain income and expense items are recognized in different periods for financial reporting and income tax purposes. Deferred income taxes are provided for such timing differences.

The Corporation changed its method of recognizing investment and other tax credits in 1987 from the flow-through method (recognized when the related asset is purchased) to the deferral method (recognized over the life of the related asset). In management's opinion, the deferral method is a more appropriate method by which to recognize the economic benefits of tax credits. The effect of this change in accounting on 1987 net income is a reduction of \$9 million.

#### Earnings Per Share

Earnings per share are computed using the weighted-average number of shares outstanding, including dilutive common stock equivalents. Fully diluted earnings per share are computed on the assumption that all outstanding subordinated convertible capital debentures were converted at the beginning of the year, after increasing earnings for the related interest expense, net of federal income taxes.

#### Mortgage Portfolio, Net

The mortgage portfolio balances consist of the following investments at December 31:

	1987	1986
Single-family mortgages: First mortgages:	(Dollars i	n millions)
Government insured or guaranteed Conventional fixed-rate	\$13,306 61,314	\$15,968 58,176
Conventional adjustable-rate Second mortgages	13,722	14,343
Second mortgages .	$\frac{1,421}{89,763}$	$\frac{2,169}{90,656}$
Multifamily mortgages:		<del></del>
Government insured Conventional fixed-rate	4,482 2,487	4,852 2,301
Conventional adjustable-rate	14	24
Total unpaid principal balance	6,983	7,177
Less:	96,746	97,833
Unamortized discount and loan fees Allowance for losses	3,081 195	3,710 174
	<b>\$93,470</b>	<b>\$93,949</b>

### NOTES TO FINANCIAL STATEMENTS—(Continued)

Implementation of FAS 91 in 1987 resulted in a net increase to unamortized discount and loan fees of \$281 million and \$785 million at December 31, 1987 and 1986, respectively

The total unpaid principal balance of loans in nonperforming status (those 90 days or more delinquent) was \$1.3 billion at December 31, 1987 and \$1.5 billion at December 31, 1986.

#### Commitments and Contingencies

#### Portfolio

The Corporation had mandatory delivery commitments outstanding to purchase \$1.6 billion of mortgages at an average net yield of 9.19 percent at December 31, 1987, compared with \$1.6 billion at 8.95 percent at December 31, 1986.

The Corporation also issues standby commitments, which must be converted to mandatory delivery commitments in order for the seller to deliver mortgages. The yield is set on the date of conversion or at the date of commitment. The Corporation had \$3.3 billion of such commitments outstanding at December 31, 1987, compared with \$1.8 billion at December 31, 1986.

#### Mortgage-Backed Securities

As issuer and guarantor of MBS, the Corporation is obligated to disburse, whether or not such amounts have been received, scheduled monthly installments of principal and interest (at the certificate rate), unscheduled principal payments when received, and the full principal balance of any foreclosed mortgage (whether or not such principal balance is recovered). Either the Corporation or the participating lender from whom the mortgages were acquired can assume the primary foreclosure loss risk on the mortgages in a pool. The Corporation, however, assumes the ultimate risk of loss on all MBS.

The total outstanding principal balance of MBS guaranteed by the Corporation was \$140.0 billion at December 31, 1987, compared with \$97.2 billion at December 31, 1986. These amounts include \$77.6 billion at December 31, 1987 and \$48.6 billion at December 31, 1986 of securities (of which \$12.2 billion and \$10.6 billion, respectively, are backed by government insured or guaranteed mortgages) for which the Corporation had assumed the primary foreclosure loss risk.

At December 31, 1987, the Corporation had commitments outstanding to issue and guarantee \$9.5 billion of MBS, upon delivery of the related mortgages by participating lenders at their option, compared with \$6.9 billion at December 31, 1986. At December 31, 1987, the Corporation also had outstanding \$11.6 billion of mandatory delivery commitments to issue and guarantee MBS, compared with \$11.1 billion at December 31, 1986. The mandatory delivery commitments include \$1.1 billion at December 31, 1987 and \$1.3 billion at December 31, 1986, for which the MBS will be used to provide credit enhancement of housing finance bond issues.

### NOTES TO FINANCIAL STATEMENTS—(Continued)

#### Allowance for Foreclosure Losses

The total allowance for foreclosure losses consists of an allowance for portfolio loan losses, an allowance for non-reimbursable foreclosure costs on claims filed with insurers, and a liability for estimated foreclosure losses on MBS for which the Corporation has assumed primary risk of default. Changes in the allowance for the years 1985-1987 are summarized below:

	Mortgage Portfolio			
	Government Insured or Guaranteed	Conventional	MBS	Total
		(Dollars in	millions)	
Halance, January 1, 1985	<b>\$</b> 18	\$ 92	\$ 20	<b>\$</b> 130
Provision	16	161	29	206
Net foreclosure losses charged-off	(8)	(143)	(19)	(170)
Transfers.		(3)	3	` <del>-</del>
Balance, December 31, 1985	26	107	33	166
Provision	. 11	249	46	306
Net foreclosure losses charged-off.	(14)	(178)	(9)	(201)
Transfers .		<u>(9</u> )	9	
Balance, December 31, 1986	23	169	79	271
Provision .	14	266	80	360
Net foreclosure losses charged-off	(13)	(229)	(43)	(285)
Transfers		<u>(15)</u>	15	_
Balance, December 31, 1987	<u>\$ 24</u>	\$ 191	\$131	\$ 346

The total allowance for foreclosure losses at December 31 is included in the following balance sheet accounts:

		1987	1986
		(Dollars i	n millions)
Mortgage portfolio, net		<b>\$195</b>	\$174
Foreclosure claims, net		20	18
Other liabilities	••	<u> 131</u>	79
		<b>\$346</b>	\$271

#### Bonds, Notes, and Debentures, Net

The average cost of all debt outstanding at December 31, 1987 and 1986 (including the amortization of issuance costs and hedging results, and the effect of interest rate and currency swaps) was 9.46 percent and 10.01 percent, respectively. The average effective maturity of all debt outstanding (including the effect of interest rate swaps but excluding \$2.0 billion and \$2.8 billion of investment agreements at December 31, 1987 and 1986, respectively for which the average maturity is indeterminate) was 48 months at December 31, 1987 and 46 months at December 31, 1986

# NOTES TO FINANCIAL STATEMENTS—(Continued)

Pursuant to the Corporation's Charter Act and related regulations, no debt obligations may be issued without the approval of the Secretary of the Treasury. Under current regulatory authority, the maximum amount of the Corporation's general obligations outstanding that are not subordinated or secured generally may not exceed, at any time, 25 times the sum of stockholders' equity, subordinated capital debentures, and reserves (the "debt-to-capital ratio"). At December 31, 1987, this ratio was 22.2:1 and the Corporation could have issued approximately \$11.7 billion of additional obligations under this provision of the Charter Act. The Secretary of Housing and Urban Development has announced his intent to reduce the required debt-to-capital ratio to 20:1 by December 31, 1988. Management anticipates this requirement will be met.

In addition to debt restrictions under the Charter Act, the Corporation is subject to a restriction set forth in certain subordinated capital debenture agreements, which limits the amount of subordinated capital debentures outstanding to not more than two times the sum of the Corporation's common stock, additional paid-in capital, and retained earnings. At December 31, 1987, the ratio was 1.2:1 and the Corporation could have issued an additional \$1.5 billion in subordinated capital debentures without violating this restriction.

### Borrowings Due Within One Year

Borrowings due within one year consist of the following at December 31:

Securities sold under agreements to repurchase—mortgage-backed securities with a carrying value of	<u> </u>	1987 (Dollars	in millio	1986 ns)
\$12 million (\$273 million in 1986) and a market value of \$12 million (\$276 million in 1986)  Short-term notes—net of \$270 million discount in 1987 (\$153 million in 1986)	\$	11	\$	271
Master notes	10	0,043		6,697
Investment agreements		214		1,654
Mortgage-backed bonds	2	2,991		3,955
Residential financing securities		12		12
Medium-term notes	2	,457		1,241
Debentures		37		_
	_13	,953	1'	7,464
Total due within one year	\$29	,718		1,294

Securities sold under agreements to repurchase had a weighted-average interest rate of 6.14 percent at December 31, 1987 (3.71 percent at December 31, 1986) and mature within one year. The securities underlying the agreements were delivered to the dealers who arranged the transactions. The dealers may have sold, loaned, or otherwise disposed of such securities to other parties in the normal course of their operations and have agreed to resell to the Corporation substantially similar securities at the maturities of the agreements. Securities sold under agreements to repurchase averaged \$181 million and \$26 million during 1987 and 1986, and the maximum amounts outstanding at any month-end during 1987 and 1986 were \$502 million and \$271 million, respectively.

Short-term notes are general obligations of the Corporation with maturities that range up to 360 days. Master notes have varying maturities and carry a floating interest rate that is adjusted weekly and is tied to 91-day U.S. Treasury bill rates. Investors have the option to increase or

#### NOTES TO FINANCIAL STATEMENTS—(Continued)

decrease the principal amount outstanding on master notes on a daily basis, usually within a range of 80 to 120 percent of the original principal balance. The largest aggregate amount of short-term and master notes outstanding at any month-end was \$10.5 billion in 1987 and \$9.6 billion in 1986. The average cost to the Corporation of such notes outstanding at December 31, 1987 and 1986 was 7.57 percent and 6.04 percent, respectively. The average remaining terms were approximately 137 days and 165 days at December 31, 1987 and 1986, respectively. The average aggregate amount of such notes outstanding during 1987 was \$7.7 billion at an average cost of 6.59 percent; during 1986, \$8.8 billion at an average cost of 7.10 percent.

Investment agreements are individually negotiated agreements that provide for the investment of a variable principal amount at a fixed or floating rate of interest. The agreements remain in effect for various periods of time. The average total outstanding during 1987 was \$5.2 billion at an average cost of 7.58 percent, compared with an average total outstanding of \$5.3 billion during 1986 at an average cost of 8.23 percent. The average cost to the Corporation of investment agreements outstanding was 7.61 percent at December 31, 1987 and 7.65 percent at December 31, 1986.

Residential financing securities are either six-month or one-year general unsecured obligations that are offered daily. The average cost to the Corporation of the securities outstanding at December 31, 1987 and 1986, was 7.69 percent and 6.40 percent, respectively. The average amount of residential financing securities outstanding during 1987 was \$1.2 billion at an average cost of 6.86 percent, compared with \$1.3 billion at an average cost of 7.59 percent in 1986.

The Corporation has long-term interest rate swap agreements with various parties to extend the effective maturity of its short-term debt obligations. Under these agreements, the Corporation makes periodic payments based on fixed rates applied to a notional principal amount and in exchange receives periodic payments based on short-term variable rates. During 1987 and 1986, long-term swap agreements on an aggregate notional amount of \$800 million and \$664 million, respectively, were terminated. The fees paid for termination (\$83 million in 1987 and \$112 million in 1986) were deferred and are being amortized over the remaining original term of the swap agreement. At December 31, 1987, the Corporation had long-term interest rate swap agreements outstanding with an average remaining term of 6 years on notional amounts totaling \$2.4 billion, compared with an average remaining term of 6 years on notional amounts totaling \$3.2 billion for swap agreements outstanding at December 31, 1986. The weighted-average interest rate being received under these swaps was 7.58 percent and the weighted-average interest rate being paid was 10.61 percent at December 31, 1987, as compared with 5.96 percent and 11.17 percent, respectively, at December 31, 1986.

# NOTES TO FINANCIAL STATEMENTS—(Continued)

Borrowings Due After One Year

Borrowings due after one year consist of the following at December 31:

		1987		1986
Maturity	arity Average Amount Cost Outstanding		Average Cost	Amount Outstandin
Mortgage-backed bonds, 1988-2015		(Dollars	in millions)	
	9.60%	<b>\$</b> 68	9.51%	\$ 80
Investment agreements, 1988-1990	_7.92	1,775	9.31	-
Debentures, net of \$108 million of discount in 1987, (\$120 million in 1986):		<del></del>		794
1988	_			
1989	10.44	10.000	11.04	13,933
1990	9.60	10,330	10.45	10,300
<b>1991</b>	8.36	9,651	9.75	8,550
1992		11,165	8.47	5,464
<b>199</b> 3-1997	9.48	6,555	10.59	3,945
<b>200</b> 3-2017	9.01	23,716	9.33	15,506
•	10.41	1,063	10.55	1,150
	9.29	62,480	10.02	<del></del>
Medium-term notes	9.40		10.02	58,848
Exchangeable debentures, 1991	3.40	159		
	12.66	450	12.66	450
dero coupon debentures, net of \$5,690 million of discount in 1987 (\$5,723 million in 1986), 2014	11.50	310	11.50	
ero coupon subordinated capital debentures, net of \$6,465 million of discount in 1987 (\$6,492 million in 1986), 2019	10.22	285		277
ubordinated capital debentures, net of \$16 million of discount in 1987 (\$17 million in 1986):			10.22	258
1989	12.99	cor		
1990.	9.15	635	12.99	<del>6</del> 35
1992	9.05	400	9.15	400
1997	7.44	250		_
2002	9.21	250	7.44	250
·		265	9.21	264
oordinated convertible capital debentures,	10.26		10.46	1,549
	4.43	12	4.40	
Total			4.43	13
10041	9.32%	\$67,339		

#### NOTES TO FINANCIAL STATEMENTS—(Continued)

The average cost includes the amortization of discounts, issuance costs, and hedging results. Annual maturities of all debt for the years 1989-1993 are \$11.5, \$10.5, \$11.7, \$6.9, and \$4.9 billion, respectively.

The mortgage-backed bonds were issued pursuant to authority contained in the Charter Act to issue bonds secured by mortgages from the Corporation's portfolio. On October 1, 1986, \$200 million of 8.625% mortgage-backed bonds due 1990 were called. At December 31, 1987 and 1986, respectively, \$71 million and \$83 million of the mortgage-backed bonds outstanding were guaranteed as to principal and interest by the Government National Mortgage Association. Assets of approximately \$381 million at December 31, 1987 and \$439 million at December 31, 1986 were restricted for the payment of principal and interest on mortgage-backed bonds.

The Corporation has issued debt securities in which principal, interest, or both are denominated in a foreign currency. Concurrently, the Corporation entered into currency swaps that converted the proceeds of the borrowings into dollars and that provide for scheduled future exchanges of the two currencies. At December 31, 1987 and 1986, the U.S. dollar equivalent face amount included in the table of these foreign currency denominated borrowings, translated at the then current exchange rate, was \$1.5 billion and \$1.0 billion, respectively. The weighted-average cost of total borrowings due after one year, adjusted for currency swap activities, was 9.42 percent at December 31, 1987 and 10.09 percent at December 31, 1986.

Included in debentures at December 31, 1987 and 1986 are debt issues, with an aggregate principal amount of \$423 million and \$371 million, respectively, which provide for either contingent principal repayment at maturity or contingent interest payments during the term of the notes based on specified indices. The Corporation has entered into swap arrangements which offset its exposure to interest rate or foreign currency exchange risk associated with the contingent payment provisions.

The following debentures are redeemable at par, in whole or in part, at the option of the Corporation: \$154 million due in 1997; \$200 million due in 1997, redeemable in whole (beginning in 1992); \$184 million due in 2013 (beginning in 1993); and \$229 million due in 2014 (beginning in 1994).

In 1987, the Corporation issued \$197 million in medium-term notes at an average cost of 9.10 percent. Medium-term notes may be fixed-rate, floating-rate, zero-coupon, or amortizing notes with maturities ranging from one to thirty years. Interest and principal may be payable in U.S. dollars or a foreign or composite currency.

In February 1986, the Corporation issued 500,000 units aggregating \$500 million principal amount of debentures due in 1996 and detachable warrants to purchase 115 million common shares. Each warrant entitles the holder to purchase one share of common stock at \$44.25, from February 1986 to February 1991 A portion of the proceeds from the issuance (\$676 million) was allocated to the warrants and recorded in additional paid-in capital. As of December 31, 1987 no warrants had been exercised.

The subordinated capital debentures, due in 1997 and 2002, are redeemable at par, in whole or in part, at the option of the Corporation, on any interest payment date commencing October 1, 1932 and July 10, 1988, respectively.

The Corporation may call for the conversion of the exchangeable debentures at any time on or prior to March 15, 1991, in which case the debenture holders have two options. They may accept the conversion and receive 10 shares of adjustable-rate preferred stock, series A for each \$1,000 principal amount of exchangeable debentures. Alternatively, they may reject the call for conversion by extending the maturity date of those debentures to March 15, 1994. The Corporation may call for the conversion only once and only on the entire issue.

# NOTES TO FINANCIAL STATEMENTS—(Continued)

The subordinated convertible capital debentures are convertible into 0.6 million shares of common stock at a price of \$19.63 per share, subject to adjustment in certain events. These debentures are redeemable at par, at the option of the Corporation.

### Stockholders' Equity

Transactions in common stock, additional paid-in capital, retained earnings (as restated), and treasury stock for the years 1985, 1986, and 1987 are summarized as follows:

					•
	Common Stock	Additiona Paid-in Capital	Retained Earnings	Treasury Stock	Total Stockholders' Equity
Restated balance, January 1, 1985			(Dollars in ti	ouende)	
New shares issued, May 8, 1985	\$412,785	<b>4011,000</b>	\$196,526	\$ (1,895)	<b>9</b> 010 400
Conversions of convertible	43,750	63,465		¥ (2,000)	\$ 918,422
debentures					107,215
Treasury stock issued for stock options and benefit plans	208 i	450		-	658
Accrual for stock appreciation rights	-	102		264	366
Net loss	_	145	_	_	145
Dividends	_	_	(6,731)	_	
Release December of the	=_		(11,096)	_	(6,731)
Balance, December 31, 1985	456,743	375,168			(11,096)
Issuance of detachable common stock purchase warrants	,		178,699	(1,631)	1,008,979
Conversions of convertible debentures	_	67,565	-	-	67,565
Treasury stock issued for stock options and benefit plans	4,283	9,187	_		13,470
Accrual for stock appreciation rights	_	(746)	_	1.610	864
Net income	_	477	_	_	477
Dividends	-	_	105,396		105,396
Balance, December 31, 1986			(14,663)		(14,663)
New shares and 1 7 3	461,026	451,651	269,432	(01)	
New shares issued, February 17, 1987 Shares repurchased	50,000	324,400	203,432	(21)	1,182,088
	_	,200	_		374,400
Conversions of convertible debentures				(98,752)	(98,752)
Treasury stock assued for stock options and benefit plans	342	787	_	_	1,079
Accrual for stock appreciation rights	658	31		3,589	4.000
Net income	-	187	_	0,003	4,278
Dividends	_	_	375.924	<del></del>	187
			(28,689)	<del></del>	375,924
Balance, December 31, 1987	512,026	<b>9777</b> 000			<u>(28,689)</u>
	12,020	\$777,006	\$616,667	\$(95,184)	\$1,810,515
The Corporation issued sight:					·

The Corporation issued eight million shares of common stock in February 1987 at \$48.25 per share. On October 22, 1987, the Corporation announced that it would purchase up to five million shares of its common stock through the open market. As of December 31, 1987, 3.2 million shares had been repurchased at an average price per share of \$29.73. These shares are carried at cost as treasury stock in the balance sheet.

Pursuant to the Corporation's Charter Act and related regulations, approval of the Secretary of Housing and Urban Development ("HUD") is required prior to the issuance of any stock of the Corporation or securities convertible into stock. The Corporation is authorized by the Charter Act to issue preferred stock on such terms and conditions as the Board of Directors of the Corporation may prescribe. To date, the Board of Directors has authorized, and the Secretary of HUD has

## NOTES TO FINANCIAL STATEMENTS—(Continued)

approved, a maximum of 4,500,000 shares of adjustable-rate preferred stock, series A, \$100 stated value. These shares may be issued only in exchange for the 12.50 percent exchangeable debentures due 1991. No shares have been issued.

In 1982, the Corporaton adopted a performance share plan, under which awards were made to officers for three separate four-year periods starting in 1982, 1983, and 1984. Performance shares are awarded, generally half in cash and half in stock, provided certain financial goals are attained with no more than 200,000 shares of common stock to be distributed under the plan. For the period 1984-87, 54,482 performance shares were earned and 24,692 shares of common stock issued. For the period 1983-86, 33,515 performance shares were earned and 16,749 shares of common stock issued. No performance shares were earned for the 1982-85 period. In 1987, the Corporation granted 148,800 performance shares for a three-year period beginning January 1, 1988.

In 1984, the Corporation adopted a stock option plan for key employees. Under the plan, the Corporation may grant options to purchase up to 1,000,000 shares of common stock. The number of shares that can be granted under the plan may be increased by up to 200,000 shares, but only to the extent that shares are not issued under the previously described performance share plan. The options do not become exercisable until at least one year after the date granted and generally expire ten years from the date of grant. The purchase price of the common stock covered by each option is equal to the fair market value of the stock on the date that the options are granted.

A summary of stock option activity follows:

	Number of Shares	Option Price
Balance, January 1, 1985 Granted in 1985 Less: Exercised in 1985 Terminated in 1985	. 304,600 94,800 (400) (69,400)	\$16.12-\$23.75 \$14.81-\$23.94 \$16.12 \$16.12-\$23.75
Balance, December 31, 1985 Granted in 1986 Less: Exercised in 1986 Terminated in 1986	329,600 344,300 (67,305) (15,610)	\$14.81-\$23.94 \$30.25-\$36.06 \$16.13-\$23.94 \$16.13-\$23.94
Balance, December 31, 1986 Granted in 1987 Less: Exercised in 1987 Terminated in 1987 Balance, December 31, 1987	590,985 121,650 (97,547) (79,845) 535,243	\$14 81-\$36.06 \$28 31-\$43.19 \$14 81-\$23.94 \$16.13-\$34.06 \$14.81-\$43.19

At December 31, 1987 and 1986, stock options on 184,259 shares and 143,917 shares, respectively, were exercisable.

Subsequent to the adoption of the 1984 stock option plan for key employees, the Board of Directors granted stock appreciation rights ("SARs") to holders of certain options. These option holders can exercise the SAR in place of the remaining related stock options, either in whole or in part. Upon exercise, they receive an amount, half in cash and half in common stock, equivalent to the difference between the market price of the Corporation's stock on the date of exercise and the option price granted. The exercise of the SAR cancels the related stock option and the exercise of

# NOTES TO FINANCIAL STATEMENTS—(Continued)

the stock option cancels the SAR. All outstanding SARs are exercisable upon attainment of certain vesting requirements and expire either when the related option expires or is exercised.

A summary of SARs activity follows:

Balance, January 1, 1985 Granted in 1985	<del>-</del>
Balance, December 31, 1985	42,049
Granted in 1986	42,049
Less: Exercised in 1986	398,920
Balance, December 31, 1986	(38,784)
Granted in 1987	402,185
Less: Exercised in 1987	121,650
Terminated in 1987	(14,333)
Balance, December 31, 1987	(75,571) 433,931

During 1986, the Corporation adopted a Restricted Stock Plan whereby shares of common stock have been awarded to certain officers and members of the Board of Directors. Shares are issued to an escrow agent until vesting requirements have been met. In 1987, 22,166 shares of stock (132,312 in 1986) were awarded and issued under the plan, 34,666 shares were recovered upon termination of nonvested participants, and 2,656 shares were released as vesting of participants occurred. Compensation expense is being recorded over the vesting period of the

In 1987, the Federal National Mortgage Association Stock Compensation Plan was adopted. This plan was designed to serve as an umbrella plan to incorporate provisions of the Performance Share Plan and the 1984 Stock Option Plan and amendments. The number of shares of common stock available under the plan is 1,250,000 shares, plus any shares authorized but not utilized

The Corporation has an employee stock purchase plan that allows the Corporation to issue up to 500,000 shares of common stock to qualified employees at a price equal to 85 percent of the fair market value of the stock on the first day of the period in which employees may elect to purchase the stock. Subject to stockholder approval, the number of shares which may be issued under the plan will be increased to 1,000,000. The Corporation has made annual offerings under the plan since 1985. In 1985, 1986, and 1987, the Corporation granted each employee the right to purchase up to 200 shares of stock during the purchase period. No shares were purchased under the plan's 1987 offering. Under the 1986 and 1985 offerings, employees purchased 93,580 and 28,620 shares, respectively. The Board of Directors has granted a similar offering in 1988 to Fannie Mae employees. Under the 1988 offering, each employee, excluding certain officers, may purchase up to

In 1987, the Corporation adopted an Employee Stock Ownership Plan ("ESOP") for qualified nonofficer employees. Under the plan, the Corporation, based on certain earnings goals, will make a contribution, not to exceed 4 percent of the aggregate base salary for all participants, to the ESOP The contribution will be made in either shares of Fannie Mae common stock or cash that is

# NOTES TO FINANCIAL STATEMENTS—(Continued)

### Cash and Investments

The composition of cash and investment securities at December 31 is summarized below. Investments are recorded at cost, which approximates market.

	1987	1986
	(Dollars i	in millions)
Cash and certificates of deposit	\$ 265	\$ 87
Commercial paper	873	<b>.</b>
Eurodollar time deposits .	299	_
Auction-rate preferred stock	572	13
Federal funds	2,992	1,530
Obligations of states and political subdivisions	761	201
Other	163	31
Total	\$5,925	\$1,862

#### **Income Taxes**

Deferred federal income tax expense relating to timing differences consists of the following:

	1987	1986	1985	
	(Dollars in millions)			
Deferred commitment fees	<b>\$</b> 76	\$ (66)	\$(37)	
Amortization of purchase discount	10 .	(116)	(4)	
Losses on dispositions of mortgages	(26)	(93)	5	
Provision for losses	(89)	7	16	
Risk management activities	10	48	39	
Tax benefit of loss carryforward		62		
Accrued interest expense deductible when		<b>V</b> 2	_	
paid	(2)	18	(7)	
Benefits from tax-advantaged investments	14	9		
Systems development costs	(8)	(1)	2	
Other items, net	4	(9)	(6)	
Total provision for deferred federal income		<del></del> ′		
taxes	<u>\$(11)</u>	\$(141)	<b>\$</b> 8	

The effective tax rates differ from the statutory rates as follows:

	1987	1986	1985
Statutory corporate rate Tax exempt interest and dividends received	40%	46%	46%
deductions	<u>(6</u> )	(1)	
Effective rate	34% ==	45%	<u>46</u> %

# NOTES TO FINANCIAL STATEMENTS—(Continued)

The Internal Revenue Service has completed its examinations of the Corporation's federal income tax returns through the year 1982. All issues raised in years prior to 1979 have been settled. Based on their examination of tax years 1979 through 1982, the Internal Revenue Service issued a formal deficiency notice. The Corporation filed suit in the United States Tax Court as a result of the deficiency notice and is awaiting the decision of the Tax Court. The outstanding issues in dispute relate to losses on exchanges of mortgages. A disputed issue relating to amounts added to the allowance for loan losses was settled in 1987. The Corporation has paid all amounts assessed and the associated accrued interest on the remaining deficiencies. It is management's opinion that any unfavorable determinations by the Tax Court would have no material adverse impact on results of operations.

The Service is currently examining the Corporation's tax returns for the years 1983 through 1985 and preliminarily has proposed certain adjustments. In the opinion of management, none of the proposed adjustments would have a material adverse impact on results of operations.

The Corporation is exempt from state and local taxes, with the exception of real estate taxes.

#### Retirement Plans

All regular, full-time employees of the Corporation are covered by the non-contributory Federal National Mortgage Association Retirement Plan or by the contributory Civil Service Retirement Law. Benefits payable under the Federal National Mortgage Association Retirement Plan are based on years of service and the employee's compensation using the average of the highest three consecutive years of employment. The Corporation's funding policy is to fund the pension expense accrued each year, up to the contribution that would be tax deductible for the year. Contributions by the Corporation are intended to provide not only for benefits attributed to service to date, but also for those expected to be earned in the future.

Pension expense in 1987 was \$0.5 million as compared with no significant expense in 1986 and \$1.1 million in 1985. Pension expense under the Civil Service Retirement Law was \$0.2 million in 1987, 1986, and 1985.

For 1987 and 1986, pension expense was determined using the "projected unit credit" method. This method is required by Financial Accounting Standard No. 87, "Employers' Accounting for Pensions" ("FAS 87"), which the Corporation implemented effective January 1, 1986. This method recognizes pension costs as benefits accrue to the participant and results in a pension cost that is a lower percentage of pay in the early years of a participant's service and a higher percentage in later years. For 1985, pension cost was determined by the "entry age" actuarial method that produces annual pension costs that are a level percentage of each participant's expected pay over the expected service life of the participants.

#### NOTES TO FINANCIAL STATEMENTS—(Continued)

The following table sets forth the Federal National Mortgage Association Retirement Plan's funded status and amounts recognized in the Corporation's financial statements at December 31, 1987:

	<u>1987</u>
	(Dollars in millions)
Actuarial present value of benefit obligations:  Accumulated benefit obligation, including vested benefits of \$16.7 million	<b>\$</b> (19.4)
Projected benefit obligation for service rendered to date	\$(39.7) 55.1
Excess of plan assets over the projected benefit obligation Unrecognized net gain from past experience different from that assumed	15.4
and effects of changes in assumptions Unrecognized net asset at January 1, 1986 being recognized over 18.25	2.0
years	(19.5)
Pension liability included in other liabilities	\$ (2.1)
Net pension cost for 1987 included the following components:	<del></del>
Service cost-benefits earned during the period	\$ 4.4
Interest cost on projected benefit obligation	2.8
Actual return on plan assets	(1.1)
Net amortization and deferral	(5.6)
Net periodic pension cost	\$ 0.5

The weighted-average discount rate and rate of increase in future compensation levels used in determining the actuarial present value of the projected benefit obligation were 7.5 percent and 7 percent, respectively. The expected long-term rate of return on assets was 10 percent.

Effective October 1, 1986, Fannie Mae amended the Thrift and Savings Plan to include a 401(k) option. All regular, full-time employees of the Corporation are eligible to participate in this plan. Under the amended plan, employees may contribute, in aggregate, up to 12 percent of their salary (not to exceed \$7 thousand annually in before-tax contributions), with the Corporation matching such contributions dollar for dollar up to 3 percent. For 1987, the Corporation contributed \$1.7 million to this plan compared with \$2.4 million in 1986.

The Corporation also has an Executive Pension Plan, which supplements for key senior officers the benefits payable under the Federal National Mortgage Association Retirement Plan. Participants are granted pension goals generally ranging from 30 to 60 percent of the average highest 3 consecutive years of total compensation as defined in the Plan, reduced by any benefits payable under the Federal National Mortgage Association Retirement Plan. Estimated benefits under the Plan are recorded as expenses over the period of employment. Accrued benefits are funded through a trust and reported in conformity with FAS 87.

In addition to providing pension benefits, the Corporation provides certain health care and life insurance benefits for retired employees. All employees who retire from the Corporation are eligible for these benefits. The cost of retiree health care and life insurance benefits is recognized as an expense as premiums are paid. These costs totaled \$0.6 million in 1987 and 1986.

# NOTES TO FINANCIAL STATEMENTS—(Continued)

### Subsequent Event

The Corporation's loan portfolio includes a significant number of individual mortgage loans insured by TMIC Insurance Co., Inc. ("TMIC") and mortgage loans to limited partnerships for which the general partner was Equity Programs Investment Corp. ("EPIC"), which are insured by TMIC. In addition, TMIC insures certain mortgages in MBS pools on which the Corporation bears the risk of foreclosure loss.

As supervisor of TMIC under a bankruptcy court-approved plan of reorganization, the California Insurance Commissioner in January 1988 suspended claim payments on mortgage insurance policies written by TMIC, pending reevaluation of TMIC's ability to pay in full all probable claims. This resulted in TMIC's default on obligations under the plan of reorganization for the EPIC limited partnerships.

Management will not be able to evaluate fully all the implications to the Corporation of TMIC's situation, including the impact on the allowance for losses, until more information is available

# **Unaudited Interim Period Results of Operations**

The following unaudited results of operations include, in the opinion of management, all adjustments necessary for a fair presentation of the results of operations for such periods. All amounts have been restated to reflect the retroactive implementation of FAS 91.

	1987 Quarter Ended			
	December	September	June	March
Net interest income (1) Commitment fees Guaranty fees Gain (loss) on sales of mortgages (2) Miscellaneous income, net (3) Provision for losses (4) Administrative expenses (5) Income before federal income taxes Provision for federal income taxes Net income Per share:	<del></del>	September millions, exc \$118 3 69 9 10 (80) (45) 84 (23) \$ 61		
Earnings (fully diluted) Cash dividends	\$ 2.40 .12	\$ .74 .08	\$ .74 .08	\$ .75 .08

(footnotes to table on following page)

### NOTES TO FINANCIAL STATEMENTS—(Concluded)

		1986 Quarter Ended			
	December	September	June	March	
	(Dollars i	(Dollars in millions, except per share amounts)			
Net interest income	. \$108	<b>\$</b> 78	\$ 94	\$104	
Commitment fees .	7	` 6	8	6	
Guaranty fees .	. 53	46	40	36	
Gain on sales of mortgages	7	17	5	2	
Miscellaneous income, net (6)	30	9	9	8	
Provision for losses	(75)	(84)	(76)	(71)	
Administrative expenses	(52)	(44)	<u>(41</u> )	<u>(38</u> )	
Income before federal income taxes	78	28	39	47	
Provision for federal income taxes	. (36)	(13)	(17)	$(\overline{21})$	
Net income	<b>\$ 42</b>	<del>\$ 15</del>	\$ 22	<b>\$ 26</b>	
Per share:	=====	<del></del>	<del></del>	<del></del>	
Earnings (fully diluted) (7)	\$.57	\$.21	\$.30	\$ .35	
Cash dividends	08	.04	.04	.04	

- (1) Includes a cumulative adjustment of \$478 million in December 1987 of additional interest income when FAS 91 was implemented and a reduction of \$55 million due principally to a revision to the estimate of uncollectible interest on nonperforming loans.
- (2) Includes a loss of \$128 million in the fourth quarter from the sale of low-yielding assets.
- (3) Includes a cumulative adjustment to deferred discount from loan sales of \$17 million when FAS 91 was implemented in December 1987 and a loss of \$11 million on the repurchase of high-cost debt at a premium in the fourth quarter.
- (4) Includes a supplemental amount to the provision of \$25 million in the fourth quarter due to the uncertain economic outlook resulting from the October stock market decline.
- (5) Includes an adjustment in the fourth quarter of \$16 million to write-off previously capitalized software costs.
- (6) Includes a \$25 million fee received in December 1986 when certain multifamily loans prepaid.
- (7) The total of the four quarters does not equal the amount for the year because the amount for each period is calculated independently based on the weighted-average number of shares outstanding during that period.